



TORREYANA

THE DOCENT NEWSLETTER FOR
TORREY PINES
STATE NATURAL RESERVE

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All Creatures Weird and Small

by Joan R. Simon

At the February 12 meeting of the Docent Society on Zoom, Andrew Pignuolo introduced us to the largely overlooked world of liverworts and hornworts, tiny plants that are “pretty much everywhere,” he said, but rarely noticed. “I’m sure all of you have walked by liverworts, and most of you have stepped on them.”



From a distance, liverworts and hornworts might seem the same, but close up (very close up) they look quite different. *Wort* means “plant” in Old English. Liverworts have structures that are flat and look a bit like a liver; hornworts have “taller” structures with caps and look something like horns. They are part of an ancient plant group (bryophytes) that predates gymnosperms (cone-bearing plants) by over 100 million years and angiosperms (flowering plants) by several hundred millions of years.

Unlike flowering plants and ferns, liverworts and hornworts are non-vascular, meaning they do not have well-developed systems for transporting water within themselves. This is the reason for their small size and flat, close-to-the-ground structure. Mr. Pignuolo explained that if you lay a sponge flat on a wet surface, it will absorb water throughout; if you stand it on one end, the upper part of the sponge will remain dry. Like all plants, liverworts need water to grow, so they must remain low and close to whatever surface they are growing on to stay wet.

Their reproductive cycle is like those of ferns, and they spread their spores in a similar manner. The main structure of a liverwort or hornwort is the thallus (pl., thalli), containing undifferentiated tissues and attached to a root-like structure at the center that mainly serves to hold the plant in place. All hornworts and about half of liverworts are composed mainly of thalli. They come in all shapes and sizes (although always very, very small). Hornwort thalli

Docent General Meeting

Date: Saturday, March 12, 9:00 am

Location: Online via Zoom (link to the meeting will be emailed to all docents)

Speaker: Prof. James Hung

Topic: Keeping a pulse on our native bees: How you can help monitor our most important pollinators

Pollination ecologist James Hung will introduce us to the fascinating lives of our beautiful native bees, discuss the challenges they face and share an exciting community-science survey program that docents can participate in, using photography to document and monitor native bee species that are found in the Reserve.

James spent nearly seven years studying native pollinators at UC San Diego. He is now an assistant professor at the University of Oklahoma, where he is studying the diversity and conservation of bee species in the Great Plains.

are often jelly-like and translucent, but some liverworts can also look similar. They can form large patches of plants or be more isolated and hidden in other vegetation. Liverworts are more diverse and can have leafy structures and even stems. In sum, liverworts and hornworts are “a mixed bag of strange-looking, diverse plants.”

Liverworts and hornworts like a stable environment, with little disturbance to the soil from invasive plants or competition from native vascular plants. Liverworts can grow on soil, bark, and rock. Most liverworts and hornworts are perennial. They require at least three months of adequate water during the winter and spring from rain, groundwater, or fog. Coastal San Diego used to be “one of the happiest places on earth” for liverworts, with vast open mesas containing vernal pools. Coastal fog and cool overcast weather also provide a felicitous environment, especially for those that grow on bark. Today the mesas are occupied by houses, and nonnative grasses have choked out their population. Increased numbers of gophers, ground squirrels (Cont. on pg. 3)

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**FLASH - Don't forget to donate
your ZooNooz magazines to the
Museum Shop.**

President's Message

Daylight is getting longer, temperatures are warming up, the spring equinox is just around the corner. Spring arrived early at Torrey Pines this year. The Reserve is already alive with flowers blooming, bees buzzing, and birds chirping. There are new plants coming back from dormancy to discover with each visit to the Reserve. Wild cucumbers are already extending their vines, and the new scrub oak leaves are turning darker green. Don't wait too long between your visits to observe your favorite endemic flowers through their short blooming cycles.

The Reserve is receiving lots and lots of visitors. The trails are no longer crowded just on weekends and holidays, but also during the week and throughout the day. Spring is an ideal time to engage with visitors, to share the unique beauty and value of the Reserve. I find that posting signs asking visitors not to pick flowers is not as effective as docents educating visitors about our rare and endangered plants and soliciting their help in protecting them.

The Reserve needs you, dear docents, to be at the Visitor Center, at the TIK, at the trailheads, and at the overlooks, enjoying the healing power of this beautiful land and engaging with the public, sharing what makes this such a unique place worth protecting.

See you on the trails,

Lynne Truong

TPDS President



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Children's Program Update

Calling All Docents!

School districts around San Diego County are reversing field trip bans, and teachers are excitedly reserving dates for the Children's Program again! All docent support is welcome. Please visit the docent website for program day detail: torreypine.org/volunteering/docentlogin. Should you have ANY questions about the Children's Program, please contact the program coordinator, Louis Sands at childrensprogram@torreypine.org. Thank you!

(Cont. from pg. 1)

and other rodents have “essentially rototilled the soil” and left many of the local habitats unsuited for liverworts. That is why 13% of the species in San Diego County are now considered rare.

There are at least 30 species of liverworts and six of hornworts in San Diego County, and at least 12 of them have been found in the Reserve. The most common liverwort, *Astrella californica*, is also one of the biggest, hence easiest to see, to wit: below is a photo taken on the North Fork of the Broken Hill Trail last month by **Donna Close**.



Below are some other species you might encounter at Torrey Pines. They are well worth tracking down (but be sure to bring a magnifying glass on your hunt). To get detailed descriptions of these and other species, you can view the video of Mr. Pignuolo's [presentation here](#).

Astrella palmeri



These can be found in the foothills and coastal areas of San Diego County.

Marchantia polymorpha



These might be seen in your garden and can also be found in potted nursery plants growing on the surface of the soil and are considered a nuisance in that setting.

Targonia hypophylla



Native to San Diego County.

Riccia lamellose



They really stand out with their gray-green coloring.

Cephaloziella divaricata



A moss look-alike and very, very small, but fairly common in the Reserve and Extension.

Frullania catalinae



They can be found in the Reserve, usually on scrub oak bark and are dependent on coastal fog.

Anthoceros fusiformis



They prefer open spaces and can be found growing on Torrey sandstone in the Reserve.

General Meeting Minutes: February 12, 2022

The meeting was called to order by President **Lynne Truong** at 9:06 am, with 93 docents attending via Zoom.

Invited Speaker

Andrew Pignuolo gave a presentation on liverworts and hornworts (see article on pg. 1).

President's Report and Announcements

The 2022 Budget and 2021 Financial Report have been approved.

The board liaison list has been finalized and is available at Docent Login on the website. **Annette Ring** is stepping down as coordinator for Roving Interpreters and **Cres Torres** and **Harry Proctor** will be taking over.

The position of program community outreach, advertising and promotion is available. If you are interested, contact **Matt Xavier**.

TPC members are invited to our general meetings. Docents are invited to the TPC annual meeting to be held from 3-5 pm on February 27 at the Martin Johnson house at SIO. It will be also available via Zoom and will be recorded. The TPC speaker series videos are on their website again.

We need volunteers for Earth Day, which is being planned in coordination with TPC. Send Lynne an email if you are interested in participating.

We will need to plan for the 100th anniversary of the Lodge opening in February 2023, again in coordination with TPC. More information to follow.

Kathy Dickey announced that the Nature Discovery Series event on Animals and Habitats will be held at 3 pm on February 19 at the Pavilion.

Cres Torres reported that **Myrna Trust** and **Molly Allison** will be taking over as CEED coordinators. The next CEED event will be on Wednesday, March 30 (see notice on pg. 8).

It was mentioned that there is free entrance to Safari Park for 65 and older during the month of February. Also during February, a Museum Pass is available at libraries and Macy's stores. It provides half-price entrance to most museums in San Diego County (including the San Diego Botanic Garden) for up to four people per entrance.

Roger reported that beginning March 20 (after daylight saving begins), one more shift may be needed at the Lodge because there will be more daylight.

Kristine Schindler, who is the coordinator for 80+ interviews, clarified that the interview does not have to be on video but can be done in Q-and-A form on a computer. When a video is done, there is a link at the end of the interview in the *Torreyana*.

The Zoom "happy hour" that **Kristine Schindler** is organizing to celebrate Valentine's Day has been moved from February 18 to February 25.

Mindful Walks, a new program that invites participants to slow down and connect with nature, needs volunteers. It is held on the first and third Sunday of every month, starting at 8 am at the Lodge. The walks usually have 8 to 14 participants. In order to expand the frequency of these walks, we need more docents to get trained. Please contact **Gabriele Wienhausen** if you'd like to participate as a walk leader.

The Bee Project received a permit a week ago. It will begin following a presentation by James Hung at our next general meeting on March 12. There will be a meeting on how to participate in this program at 1 pm on March 19 at the Pavilion. This is a citizen-science model developed to support Dr. Hung's research. You can log your hours into BI for this project.

Docent rosters will be distributed at the end of February.

Ranger's report

Ranger Stephanie Adams reported that Earth Day has been approved for Saturday, April 23. Reopening of the video room will take place soon (it has started as of 2/17/22).

Over 60 applications for park aides are being reviewed for up to two positions.

The dead Torrey pine in the Lodge parking lot was removed, but the one on Torrey Pines Road in the bike path has still not been removed. The City claims it is the Reserve's job, but Supervising Ranger Dylan Hardenbrook believes it could be the utility company's responsibility.

Stephanie requested that we send out a Google Group reminder on the process of contacting SURCOM. Stephanie stressed that calling the SURCOM number was more efficient than calling 911. She asked us to store this number in our phones and not call 911 directly.

Docent of the Month

Debby Sherman was named DOM. Debby works at the TIK and with the Whacky Weeders. She had over 200 hours last year and does not always record all her hours (see pg. 6).

Treasurer's report

Janet Ugalde reported that the 2021 Year-End Financials are now online. Our cash reserves increased last year. Janet showed the 2022 budget and explained that it is based on funding requests from program leaders. Some items are still up in the air due to COVID. Please contact the appropriate program leader if you have spending requests.

San Diego Unified School District has had no field trips during COVID, which impacts spending on the Children's Programs. (See Children's Program update on pg. 2.)

Meeting adjourned at 11:07 am.

Nature Discovery Series: Animals and Habitats

by Matt Xavier

On Saturday, February 19, at the Children's Pavilion, **Bruce and Patty Montgomery** gave an intriguing



presentation filled with captivating stories about the mammals and habitats in the Reserve. They described

Torrey Pines as a convergence of a diverse number of ecosystems. They explained the wide-ranging habitats of most of the Reserve's mammals, including the cottontail rabbit, the California ground squirrel, and seemingly everyone's favorite, the big-eared woodrat. They educated and entertained the audience with their uniquely humorous style, which set everyone at ease as they soaked in the information. A sincere thank you is extended to Bruce and Patty for their time and dedication to make the presentation worthwhile as well as enjoyable.



The Boomerang (That Wasn't) – Lost and Found

by Susanne Florin, TPC Executive Director

It was a beautiful spring morning about five years ago and the Children's Program was in full swing. **Susan Elliott** was up front at the children's meeting place behind the Lodge – and a group of school kids was her captive audience. She was showing the Kumeyaay props. There were bows and arrows, a woodrat/digging stick, an animal club and a throwing stick. Curious kids were gathered around the items. Susan was about to explain how they work. When she got to the throwing stick, Susan explained that the stick was used to throw at the legs of animals to disable them. She stressed that the stick was not a boomerang and continued "I'd like you to throw..." But one little boy could not wait any longer. He picked up the stick, swung it in a wide circle and winged it – all the way down into the canyon. Susan never got to finish her sentence about throwing the stick low to the ground into the lemonadebush. Since the stick wasn't a boomerang, it never came back (the boy hadn't expected that!).

The stick was gone and could never be retrieved.

Fast forward to January 2022. The Children's Program was not in full swing, but the pandemic was. Down in the canyon two geology engineers were surveying the cliffs behind the Lodge. **Joe Meyer** saw them working down in the canyon, and remembered the throwing stick incident. He called down to the workers in the canyon. He got their attention and asked them to look for a throwing stick. After carefully searching a part of the canyon that nobody had been to in years, one of the men found the stick and brought it back up (see photo!). To everybody's surprise, after all those years, the stick was in great condition. After five

years, the stick was returned to the Children's Program closet – "to be thrown another day!" as Joe put it.

John Niven, a soils engineer who found the stick when he was working in the canyon behind the Lodge.

Photo by TPC President, Rick Gulley



New Leadership at TPC

At its annual meeting on February 27, the Torrey Pines Conservancy (TPC) welcomed four new officers: Rick Gulley, President; Nigella Hillgarth, Vice President; Joann Selleck, Secretary; and **Barbara McCardle**, Membership. **Donna Close** will continue as treasurer.

Three board members, who each served nine consecutive years, have been "termed out" (for at least one year) or are permanently retiring: Peter Jensen (President, who had also served a previous nine-year stint); John Durant, and Anne McCammon (Secretary).

Three members are joining the board of directors: Barbara McCardle, Dave Van Cleve, and Roger Showley.

Docent of the Month: Debby Sherman

Photo by Herb Knufken

Becoming a docent was like moving into a new neighborhood - the critters and plants of Torrey Pines as not just nature, but as neighborhood. Whacky Weeding and working at the TIK allowed me to get to know some of these neighbors very well. For example, the Peregrines: the family scandals, the neighborhood entertainment, especially in Guy Fleming, and then their "gang" struggles with the TIK ravens. More specifically, my neighbor Peregrine who flew right over my head while weeding on the Guy Fleming Trail on his/her way to abduct (and devour) a little chick who was nearby, but the chick was smarter than the Peregrine had expected and ducked under a yucca plant just in time! And a few years before the pandemic started, the fledglings would squawk at length during Monday weeding, and then we realized that it all had to do with the latest Peregrine scandal. The Peregrine mom had unseated the original mom unceremoniously that year (and had marauded the Peregrine family the year before that, knocking one of the chicks out of the nest to the shore) and then proceeded to replace the original dad with a fleeter, younger male who didn't know a thing about feeding his young family. The Peregrine fledglings have also been known to cross territorial lines and start "gang" -type warfare with the TIK raven neighbors.

Then there was the time a few years ago at the TIK when the local rattlesnake decided s/he had had enough of the weekend visitors and started to head toward the TIK from behind the woodrat nest. I watched it head into the woodrat home and imagined a "herd" of woodrats rudely woken up and



scattering all over the area, but, though this rattlesnake was surely trespassing in their home, s/he meant no harm. S/he just wanted to get home as quickly as possible and took the shortest route, which happened to be through the woodrat home, in order to get across the path to his home in the shrubs on the other side. However, this rattler might have also been the same one whom a squirrel neighbor squared off with (right behind the TIK bike rack) who did a chirping song-and-dance show on a twig to desperately try to distract the rattler from nearby bushes where her babies must have been hiding. Well, the rattler finally, hours later, got tired of her show, and the ending was not happy for the squirrel family.

So Torrey Pines for me is nature as neighborhood, not just as a visitor destination, where I can "window watch," understand, and gossip about thanks to all the docent - human neighbors - and of course, try to preserve.

Before moving into this neighborhood which also coincided with moving to San Diego, I lived in many neighborhoods across the continent while growing up - starting in Chicago, then the East Coast, then Los Angeles (pre-Disneyland!), then back to the East Coast (Philly), then the Midwest (Michigan and Indiana). So there were plenty of chances for cross continent road trips (in a 1950 Plymouth with four kids and two cocker spaniels), and visits to many National Parks. Eventually, I did research in child abuse and taught sociology (inequality, urban underclass and research methods) to Chicago (much fun) and Santa Barbara (much less fun) undergrads and followed my nano-scientist husband around on his "tours of duty" and raised a son who has just ditched his environmental engineering job formulating plastic from algae for punk rock band-hood.

Last, my favorite nature adventures, although at times more adventure than intended, include untrained, extemporaneous rope climbing out of a canyon in southern Israel to avoid rushing water (think slot canyon at Zion before it gets really narrow), when the guide miscalculated the

chances for downpours; being stuck in the sand in a jeep at the tip of the Sinai desert in Ras Muhammed; and watching a full moon rise over the mountains in the desert.

Museum Shop Spotlight

by Nancy Walters

The shop team would like to bring your attention to the beautiful ceramic necklaces that we carry! With a lovely pine needle and pine cone imprint, these necklaces are made by local ceramics artist Susan Kirchmer. They are reasonably priced at \$19.95 and come in a green/brown glaze or a blue/brown glaze. Come in and check them out!



Ground Pink by Rhea Bridy

Please don't step on me.

I cast my shadow and claim my presence in the sun.

I am soft pink and white and yellow, giving smiles from sloping, humble places. I am gorgeous. I am energy.

I made it. Whew!

Nature Discovery Series

On March 5 at 3 pm, Jane Barger will give her "Gray Whales" talk, originally scheduled for January but postponed because of rain. It will be held at the Children's Pavilion and is open to the public.

On March 19 at 3 pm, Margaret Fillius will present "Plants and Pollinators"

Contact **Kathy Dickey** for more information.

Torrey Pines Book Club

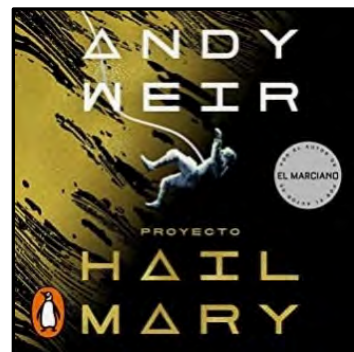
We will continue to meet via Zoom at our regularly scheduled time. Please notify **Ken King** if you plan to participate and if you need any extra help getting connected.

When: Tuesday, March 8, 1:00 pm

What: *Project Hail Mary* by Andy Weir

Amazon says:

Ryland Grace is the sole survivor on a desperate, last-chance mission – and if he fails, humanity and the earth itself will perish. Except that right now, he doesn't know that. He can't even remember his own name, let alone the nature of his assignment or how to complete it.



All he knows is that he's been asleep for a very, very long time. And he's just been awakened to find himself millions of miles from home, with nothing but two corpses for company. His crewmates dead, his memories fuzzily returning, Ryland realizes that an impossible task now confronts him. Hurling through space on this tiny ship, it's up to him to puzzle out an impossible scientific mystery – and conquer an extinction-level threat to our species. And with the clock ticking down and the nearest human being light-years away, he's got to do it all alone.

Or does he? An irresistible interstellar adventure as only Andy Weir could deliver, *Project Hail Mary* is a tale of discovery, speculation, and survival to rival *The Martian* – while taking us to places it never dreamed of going.

All TPDS docents are welcome. Meetings usually last a couple of hours.

April 12: *West with Giraffes: A Novel* by Lynda Rutledge.

80+: A Conversation with Carolyn Colwell

Interviewed by Kristine Schindler

Carolyn has been a docent since 2011 and is now a Lifetime member.

Tell us about your childhood.

I was born in New Jersey and moved to St. Louis at 18 months of age. That is where I grew up.

Where did you go to school, including college?

I went to the University of Michigan (GO BLUE!) for four years as an undergraduate and then earned my Master's degree at Teacher's College, Columbia University, in New York City. Cliff and I met at Michigan – I was dating his roommate, who was in law school, when Cliff was in medical school, and he and I ended up having more in common. I was a pediatric staff nurse initially, and then taught Child Health Nursing at San Diego State University for 28 years. I always wanted to keep my hand in nursing even when raising our family. I still enjoy being with children, but in retirement wanted to focus on older populations and so volunteer for hospice, in addition to my time at Torrey Pines.

How did you end up moving to San Diego?

We moved to San Diego in 1970. I feel almost like a native San Diegan. We have lived in La Jolla most of that time (25 years near UCSD and then closer to the village of La Jolla). Soon we will be moving into the retirement community of White Sands. **Ken King**, a fellow docent and also a resident of White Sands, is helping prepare us for this big change.

Why did you become a docent?

Growing up in St. Louis there was not a lot of closeness with nature. The Mississippi River was there, but not very appealing, plus summers were quite hot and humid. When I was a teenager, a good friend recommended a camp in northern Minnesota, and I decided to join her there. Four summers of camping and canoeing through the Mississippi River Boundary Waters provided wonderful experiences, during which I learned about the amazing beauty of our natural world. Cliff and I took a course soon after coming to San Diego (connected to Torrey Pines) which planted the seed that upon retirement from nursing led me to become a docent. My husband, Cliff, became a Seabee; with his retirement approaching, he wanted to get involved as a volunteer at Torrey Pines, as well. He is known as the hardest-working 84-year-old they have! He is very dedicated to it and loves to learn on the go.



What have you enjoyed the most?

Early on I knew several people who were Lodge hosts, and that job has always appealed to me. I also enjoy Trail Patrol/Roving Interpreter. I love being out on the trail, meeting people, getting exercise, and appreciating the beauty and special nature of this place.

Piece of advice for a new docent?

The requirements are very reasonable to accomplish without blocking out other things in your life. It is a wonderful opportunity to be out in nature, and the people you are exposed to are just so special (enthusiasm, knowledge, and dedication). I feel very strongly that climate change is something we all need to be concerned about, and being a docent is one way to help people understand and appreciate how important it is to preserve nature. It provides a lot of opportunities and makes you feel like you are doing something worthwhile.

Find the thing you like best to do and spend your time doing it. Be open minded to new learning and commit yourself to staying with it. Take advantage of the very special people who are here and learn from them, such as **Louis Sands, Barbara Wallach, Pao Chau, Kristine Schindler**, and many more. They can greatly enhance your experience and your growth.

Recent travel to share?

We went to Canada and it was very involved due to the pandemic and restrictions. We enjoyed the Canadian Rockies and had time in Banff to hike. It was breathtakingly beautiful with perfect weather.

Do you have a bucket list?

Not really a bucket list item, but...a desire to adjust positively to a new community at White Sands.

Anything else to bring up?

If you have not read *Braiding Sweetgrass* yet, I encourage you to do so. It's written by Robin Wall Kimmerer, a Native American woman who has an amazing knowledge and love of nature. It's beautifully written and it's best to read it one chapter at a time. [Click here to see video.](#)

March CEED: Mission Trails Regional Park

Date: Wednesday, March 30

Time: 9:30 (arrive at 9:00 to explore the Visitor Center)

Place: Mission Trails Regional Park Visitor Center, One Junipero Serra Trail, San Diego

Duration: 1.5 – 2 hours

Leaders: Mission Trails Docents

Admission and parking are free. The walk will be about one mile on fairly even surfaces with some slight elevation change. Visit mtrp.org for further information and clear directions.

Myrna Trust and **Molly Allison** are the new coordinators for the CEED program.

Torrey Pine Trees 101

Text and photo by Kathy Dickey

What makes the Torrey pine (*Pinus torreyana*) so special? I would argue that its very survival is a beautiful wonder. In a small, protected enclave surrounded by freeways, houses, a university, the Pacific Ocean, and a golf course, it clings to life. The tree lives in an environment of drought, nutrient-poor sandy soil, steep cliffs, and insect invasions. Whipped by the constant onshore salt spray and wind, it bends and bows low to adapt itself to the onslaught, resulting in appealing twisted sculptural shapes.



In 1916, naturalist Guy Fleming and botanist Ralph Sumner visited the area where the Reserve is now and became increasingly distressed by what they saw. Logging, domesticated animal grazing, dirt roads, and other dangers had decimated the trees. The "original forest," Fleming predicted, would soon become extinct unless it was protected. He remarked, "Of course the species will not be lost, for seed collectors have sent it to all parts of the globe. But away from their beloved wind-swept cliffs they become pyramidal and as stately as any other well-ordered pine and have no resemblance to the grotesque old warriors flaunting their green banner on the bluffs above the sea." Luckily for all of us, many people in San Diego stepped up to protect the area.

As we approach the Torrey Pines Visitor Center today, the sign that greets us says, "Welcome to the home of the nation's rarest pine tree." Yes, it is so rare that in 2011, the International Union for the Conservation of Nature included *Pinus torreyana* as "critically endangered" on its red list of threatened species. They said it was in decline, with fewer than four thousand trees in the Reserve, suffered from urbanization, was under acute risk of fire danger, and had a small area of occupancy with a fragmented population. The California Native Plant Society has also declared the tree "rare and endangered." The trees in our Reserve lack genetic diversity, making them less resilient to diseases.

But what else makes the Torrey pine tree so special? Since its discovery in 1850 by surveyor and naturalist Charles Parry, people have struggled mightily to nurture and protect it, with visitors from all over the world returning time and again to admire it. Yes, its harsh natural habitat elicits an

unusually contorted and often sparse, artistic form. Each tree has a character of its own. But this tree is one of a kind scientifically, as well.

The Torrey pine is an endemic species only in our own Reserve at the northern edge of San Diego and on Santa Rosa Island off Santa Barbara, separated by 175 miles of ocean. The two groups of trees are both *P. torreyana* but are considered two subspecies by genetics and some physical characteristics. A few trees in the Reserve have been dated to over 200 years old, although most live a century or less.

The root system is extensive. A tiny seedling may quickly send a taproot down 24 inches seeking moisture and nutrients. A mature tree may have roots extending 250 feet. The trees get much of their water from fog, which collects on the needles in special grooves and falls to the ground near the root system. The needles, usually five to a bundle (or fascicle), are stronger and longer (6 to 12 inches) than on other pines. The bark develops dark-gray plates that flake off to reveal a red-brown color underneath. The young female "conelets" develop high in the tree and are red, a unique characteristic. The male strobili form lower in the tree and shed a yellow pollen that floats in the wind, usually in February. In most species of pine, the mature cone develops in two years, but the Torrey pine takes three years. The cone weighs about a pound and is 4-6 inches long, with sharp scales, making it larger and heavier than most other pine species. It is filled with large brown and very hard seeds, two per scale, for a total of about 100 seeds. As the seeds are slowly expelled, the cone may remain on the tree for three to ten years. Of the 100 seeds dispersed, only a few survive to germinate and become saplings. California Scrub Jays and small mammals eat many of the seeds, but also cache some for their later use in holes in the ground, helping the seeds to germinate deeper in the ground.

Many of us were grieving over the last few years as we watched numerous favorite trees within the Reserve succumb to drought and bark beetle infestation. This seems to be a 10- to 20-year cycle that has been occurring throughout the West in many species of pine. Seedlings and saplings are infrequent in the Reserve... but remain a source of hope.

As our own former naturalist Hank Nichol wrote, "Some trees, like some people, develop character during hard times. That's what I think is special about the Torrey pine... character!"

"The City of San Diego ... stands alone among the cities of a world in having within its confines a singularly outstanding example of Nature's Artistry ... This is Torrey Pines Preserve."

— Guy Fleming, Superintendent, Southern Division, California Division of Parks, 1942

Bird of the Month: Hooded Merganser

by Jack Friery; photo by Herb Knufken

Our focus bird this month is the **Hooded Merganser**, *Lophodytes cucullatus*. This lovely and unique bird is a member of the duck family. It is found on freshwater ponds and streams, where it forages for fish, crayfish, and aquatic insects. (It is uncommon, but was recently seen, at Torrey Pines State Natural Reserve.) Hooded Mergansers find their prey underwater by sight. They can actually change the refractive properties of their eyes to improve their underwater vision and, in fact, have an extra moveable eyelid to protect their eyes underwater.

The Hooded Merganser is a cavity nester, laying its eggs in tree cavities (or installed nest boxes). The young, when they're ready to join the world, will tumble from the nest cavity to the ground and then march behind the hen to the water.

The bird's generic name, *Lophodytes*, comes from the Greek words for "hooded diver."

Sources: Choate, *The Dictionary of American Bird Names*;

Unitt, *San Diego County Bird Atlas*

allaboutbirds.org/guide/Hooded_Merganser/overview

en.wikipedia.org/wiki/Hooded_merganser



Torrey Pines Docent Society Bird Survey: February, 2022

Number of species: 75
(+6 other taxa)

Blue-winged Teal 3
Cinnamon Teal 7
Northern Shoveler 32
Gadwall 8
American Wigeon 38
Mallard 6
Northern Pintail 22
Green-winged Teal 18
Canvasback 2
Lesser Scaup 13
Surf Scoter 9
Bufflehead 20
Red-breasted Merganser 11
California Quail 2
Pied-billed Grebe 2
Western Grebe 94
Mourning Dove 46
Anna's Hummingbird 60
Allen's Hummingbird 5
Rufous/Allen's Hummingbird 15
American Coot 13

Semipalmated Plover 6
Long-billed Curlew 4
Least Sandpiper 19
peep sp. 8
Willet 12
Heermann's Gull 8
Ring-billed Gull 32
Western Gull 31
California Gull 12
gull sp. 10
tern sp. 2
Red-throated Loon 1
Brandt's Cormorant 256
Double-crested Cormorant 7
Brown Pelican 12
Great Egret 5
Snowy Egret 2
White-tailed Kite 1
Cooper's Hawk 1
Red-shouldered Hawk 2
Red-tailed Hawk 8
Nuttall's Woodpecker 8
Northern Flicker 13
American Kestrel 3
Peregrine Falcon 3
Black Phoebe 12

Say's Phoebe 11
Cassin's Kingbird 8
flycatcher sp. (Tyrannidae sp.)
1 Brief look, 2 sec. in bad
light. Possible olive-sided
flycatcher. Forked, longish tail.
Solid darkish color.
Hutton's Vireo 2
California Scrub-Jay 13
American Crow 24
Common Raven 18
Bushtit 75
Wrentit 84
Ruby-crowned Kinglet 4
Blue-gray Gnatcatcher 1
California Gnatcatcher 7
House Wren 1
Bewick's Wren 22
California Thrasher 16
Northern Mockingbird 5
Hermit Thrush 9
Scaly-breasted Munia 24
House Finch 73
Lesser Goldfinch 23
Dark-eyed Junco 1
White-crowned Sparrow 45

Golden-crowned Sparrow 8
Savannah Sparrow 2
Song Sparrow 57
California Towhee 70
Rufous-crowned Sparrow 1
Spotted Towhee 26
sparrow sp. 1
Western Meadowlark 71
Red-winged Blackbird 16
Orange-crowned Warbler 20
Common Yellowthroat 7
Yellow-rumped Warbler 104

Observers: Anonymous,
Kathy Dickey, Robert
Turner, Nancy
Richardson, Marty Hales,
Tsaiwei Olee, Gabrielle
Wienhausen, Sally Aron,
Andy Rathbone, Phyllis
Kusznier, Steve Neal,
Robert James, David
Walker

View this checklist online at ebird.org/checklist/S103034907

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



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