

Mission Trails Regional Park News A PUBLICATION OF THE MISSION TRAILS REGIONAL PARK FOUNDATION Vol. 32, Number 1, Winter 2021

IN THIS ISSUE Winter at Mission Trails Saving San Diego Thornmint **MTRP Foundation Highlights**

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In partnership with the City of San Diego, preserve and protect the natural environment of Mission Trails Regional Park and provide and promote educational and recreational opportunities.

MESSAGE FROM Lane MacKenzie, MTRP Foundation Board President



We just lived through a year that will be discussed and considered for generations. Each of us had our unique challenges, but one thing that brought us together was our appreciation of nature and Mission Trails Regional Park (MTRP). Indeed, the park has had more visitors than ever, and we at the MTRP Foundation are pleased to report that many of these individuals chose to make a contribution to support the park and Foundation. We are so grateful for the contributions as regular sources of funding for the MTRP Foundation—grants, facility rentals, and in-person Gift Shop sales—have not been available. The MTRP community heard our appeal and answered

the call; the funds received will support park maintenance, education programs, habitat restoration, and more. Thank you.

As you will read in this issue of the newsletter, we have just completed a three-year project to restore the population of an endangered native plant, San Diego Thornmint, at Mission Trails. Funded by the TransNet Program at SANDAG, the project allowed us to collaborate with City of San Diego biologists and local rare plant experts to significantly increase the Thornmint plant population at MTRP. We invite you to join us to learn more about the project in an online presentation with Mark Berninger, Natural Resource Manager, City of San Diego, on Thursday, March 11. Additionally, Pat Abbott, Ph.D., is presenting a series about the geology of the park. More information about these programs can be found on page 3 and on our website, www.mtrp.org.

I would like to recognize both my fellow MTRP Foundation Board members and our staff for their hard work and dedication to Mission Trails Regional Park in 2020. March 2021 will mark one year since our staff have worked onsite at the park, but despite the distance they and our Board members remain committed to our mission and our charge to preserve, protect, and enhance the park today, and for future generations.

Visitor and Interpretive Center (619) 668-3281 MTRP Foundation (619) 668-3280

Email mtrp@mtrp.org Web Site www.mtrp.org

Mission Trails Regional Park Foundation, Inc., established January 1988, is a non-profit public benefit corporation organized for the purpose of preserving, improving, and maintaining Mission Trails Regional Park.

ON THE COVER

The Old Mission Dam at Mission Trails Regional Park is a nationally registered historic landmark and a starting point for hikes into Oak Canyon, the East Fortuna Mountain region, or along Father Junipero Serra Trail and the San Diego River. Photo: Gerry Tietje.

EDITOR'S NOTE: The modern history of Mission Trails Regional Park series will continue in our next issue. **IMAGE CREDITS** Cover: Gerry Tietje; Page 2: Jayna McLeod, Angie Ollman; Page 3: David Cooksy; Pages 4-5: Gerry Tietje; Pages 6-7: RECON Environmental; Pages 8-9: Angie Ollman, Jennifer Morrissey; Pages 10-11: Millie Basden, Don Endicott, Wendy Esterly, Gerry Tietje, Angie Ollman: Page 12; Angie Ollman.

Non Topic

THE MISSION TRAILS REGIONAL PARK (MTRP) FOUNDATION is pleased to continue its OnTopic online lecture series with presentations about the geology of Mission Trails with Pat Abbott, Ph.D., and another with Mark Berninger, Natural Resources Manager, City of San Diego on a project at Mission Trails to expand the population of an endangered native plant.

The OnTopic lectures are free, but registration is required. Visit our website at www.mtrp.org/programs to register. Many thanks to SDG&E and donors to the MTRP Foundation for making these programs possible.



Geology of Mission Trails with Pat Abbott, Ph.D.

How was Mission Trails Regional Park built? The science of geology can explain it. Take some basic building blocks of elements and minerals, and then use them to build rocks. These rocks are subjected to Earth's active processes; some build new rocks, some transform existing rocks, and some destroy rocks. The rocks of Mission Trails Regional Park record the history of this area during the past 126 million years. This series of lectures will 'build' our modern-day Mission Trails; watch the first lecture in this series on the MTRP Foundation's YouTube channel.

> THURSDAY, MARCH 4, 6PM

Earth Processes: Past and Present

The Earth is 4.57 billion years old. The same cycles have operated for billions of years. In the tectonic cycle, the outer shell of the Earth consists of pieces or plates which are formed and destroyed. In the hydrologic cycle, solar energy elevates water into the atmosphere; it falls as rain or snow, then flows back to the ocean under the pull of gravity. In the rock cycle, igneous, sedimentary, and metamorphic rocks transform into and from one another.

> THURSDAY, MARCH 18, 6PM Mission Trails Regional Park Forms in Four Phases

The site stays the same, but the rocks and processes change during the past 126 million years. In phase 1 (126 to ~90 million years ago), volcanism and plutonism build mountains. In phase 2 (~90 to 56 mya), the pull of gravity and erosion by running water reduce the mountains to hills. In phase 3 (56 to ~34 mya), the region was buried beneath a huge alluvial fan built of gravels and sands brought by a river from modern-day Sonora, Mexico. In phase 4 (~34 mya and ongoing), erosion again dominates and carves out Cowles and Fortuna Mountains, Mission Gorge, and the modern topography of Mission Trails Regional Park.

FOR MORE INFORMATION about the geology of Mission Trails, purchase a copy of Pat Abbott's book, *Geology: Mission Trails Park* through our online store: **www.mtrpstore.org**. You may also watch *Rise and Fall of the Mountains at Mission Trails Regional Park* on our YouTube channel.

> THURSDAY, MARCH 11, 6PM

Rare Plant Conservation at Mission Trails Regional Park: Success Stories and Stepping Stones for the Future

Presented by Mark Berninger, Natural Resource Manager, City of San Diego

In 2017, the Mission Trails Regional Park Foundation was awarded a grant from the TransNet Program at SANDAG to engage local rare plant expert Mark Dodero and RECON Environmental to expand San Diego Thornmint populations in Mission Trails. The three-year project has ended and was a smashing success! The population of plants that once numbered under 100 individuals in 2017 blossomed to over 800 plants. (SEE THE FULL DESCRIPTION ON PAGE 7.)



WINTER in Mission Trails



ABOVE FROM THE TOP: Yellow-rumped Warbler, White-crowned Sparrow.

BY GERRY TIETJE

Cottonwoods have shed their yellow leaves, bright red berries hang from Toyon branches and Mule Deer appear more frequently on the hillsides. These are all signs of winter in Mission Trails Regional Park. Although much of the park now lies dormant, waiting for renewing winter and spring rains, it's a time that bird lovers look forward to because several species of birds are here only during the late fall, winter and early spring months.

When they first arrive, in late September, White-crowned Sparrows and Yellow-rumped Warblers blend in with rather drab grassland and riparian surroundings. I always listen for the first thin whistling songs of the Whitecrowned Sparrows, a true harbinger of fall in San Diego. They frequent the grasslands, where they find food. Yellow-rumped Warbles (subspecies Audubon's Warbler in the West) flit from branch to branch in their quest for seeds and small insects. These adorable birds are affectionately called "butterbutts" by avid birders because of their bright yellow rump patch. Cedar waxwings are typically seen around Thanksgiving and stay through the winter. Flocks of waxwings fly around searching for plump ripe Toyon berries. These black-masked bandits – adults with silky brown feathers, yellow-tipped tails and red-tipped wings – gorge themselves whenever they come upon a bush full of these berries.

Winter birds also populate our inland lakes, including Lake Murray and Kumeyaay Lake. Ring-necked Ducks are commonly seen in our area by November. These handsome birds are diving ducks and feed on submerged plants and aquatic invertebrates. Males and females sport a bright white ring near the tips of their bills, not their necks, as their name would suggest. Another winter visitor, the Northern Shoveler, is truer to its name. Male and female Shovelers sport long shovel-like bills which







they use to strain food items from the water. They are dabbling ducks and at times can be seen in groups of 20 to 30 swimming endlessly in tight circles stirring up food. As winter progresses toward spring, these ducks show more and more of their colorful breeding plumage.

Winter birds also populate our inland lakes, including Lake Murray and Kumeyaay Lake

Historically, our winter birds stay in San Diego County through late winter or early spring. Yellow-rumped Warblers are the first to leave in early March, but some Whitecrowned Sparrows and Cedar Waxwings linger into early April. Ring-necked Ducks and Northern Shovelers are commonly seen through March. I've noticed that in recent years our winter birds, especially ducks, seem to be leaving earlier than in previous years, possibly due to climate change. We can be thankful that we can still enjoy so many birds that do winter in Mission Trails Regional Park each year. **THIS PAGE, CLOCKWISE FROM TOP LEFT:** Cedar Waxwing eating a berry, female Ring-necked duck, Northern shoveler, flock of Northern Shovelers straining food from the water.







ABOVE FROM THE TOP: A California bumblebee is seen on a San Diego Thornmint flower.

Seeds were produced in cooperation with the San Diego Zoo.

Inormat

Endangered Thornmint Plant Restoration Project at MTRP

The City of San Diego is home to some of the most rare and special plants in the Southern California region. One of those rare plants is San Diego Thornmint (Acanthomintha Ilicifolia).

The City started monitoring these plants more that 20 years ago as part of a groundbreaking Rare Plant Monitoring Program, which is part of the Multiple Species Conservation Program (MSCP), enacted in 1997 to preserve habitat and help conserve the region's spectacular biodiversity. The Mission Trails Regional Park (MTRP) Foundation has been a critical partner in the MSCP, and they have partnered with the City once again to help improve habitat and increase the park's populations of San Diego Thornmint. The MTRP Foundation is a crucial partner in the restoration of this highly specialized wildflower, and as part of their commitment to conservation, the Foundation applied and was awarded a grant from the TransNet Program at SANDAG. These funds allowed the Foundation to engage local rare plant expert Mark Dodero and RECON Environmental to expand the park's San Diego Thornmint populations. After three years, the project has now reached the end of grant funding and it was a smashing success! The population of plants that once numbered under 100 individuals in 2017 has now blossomed to over 800 plants in the most recent monitoring in spring of 2020. This is great news for this population at Mission Trails, but the work is far from over. Preserving each population and their genetic diversity is critical for a robust regional conservation effort. The partnership that the MTRP Foundation has with the City is a great example of the collaboration it will take to bring San Diego Thornmint and other rare and endemic plants back from the brink of extinction. As we move into the future, involvement and engagement from groups like the MTRP Foundation are critically important. Sharing the story of this success will hopefully lead to more opportunities to develop partnerships and secure larger grants to expand and enhance conservation efforts across Mission Trails and, in doing so, boost the resiliency of the rare plants across the entire Southern California region.

-Mark Berninger, Natural Resource Manager, City of San Diego

Mark W. Dodero, RECON Environmental

After a three-year restoration and enhancement project focused on San Diego Thornmint at Mission Trails Regional Park, we can report a successful effort to increase the presence of the endangered native plant.

San Diego Thornmint is federally listed as threatened, state listed as endangered, and is considered a narrow endemic species under the City of San Diego's Multiple Species Conservation Program (MSCP). The species is found only in San Diego County in the United States and in northwestern Baja California. Populations of San Diego Thornmint are declining throughout San Diego County, and are threatened by pressures from urban development, habitat disturbance, and invasion of non-native species with as many as one-third of historical occurrences believed to have been lost. Thornmint typically grows in open areas with little competition with shrubs and other plant species.

The San Diego Thornmint Expansion Project began in the fall 2017 and ended in the summer 2020. The initial focus during the first year was to begin the process of getting the non-native weeds under control so that the Thornmint plants would have less competition for light and water. Also, during that first year, the San Diego Zoo Institute for Conservation Research's Native Seed Bank began growing out additional





Thornmint plants to produce as many seeds as possible. The goal of the Zoo's efforts was to increase the number of seeds available so that we at RECON Environmental could disperse them. Prior to any seeding efforts, monitoring of the plant population in the spring of 2018 revealed the presence of 43 Thornmint plants in the natural population.

In the second year of the project (2019) the weed control efforts continued and the first lot of bulked Thornmint seed was provided for dispersal. As weeds were controlled, more open ground was available for Thornmint to grow. Fenced cages were constructed at the site to protect the seedlings from rabbits and rodents. The seeds were dispersed a few days prior to heavy rainfall, grew well and flowered in the spring. A total of 374 Thornmint flowered and set seeds successfully. Of those 374 plants 319 plants were found in the natural population and 55 plants were found in the seeded plots. Each year of the project, weeding reduced the cover of non-native species and this led to an increase in flowering native species.



CLOCKWISE FROM TOP LEFT: A close-up view of San Diego Thornmint leaves and flowers. A fenced cage protected seedlings from rabbits and rodents.

Staff giving supplemental water to new seedlings.

In the final year of the project, additional Thornmint seeds were produced by the Zoo, and seed collected by the project biologists from the seeded and natural population were dispersed throughout the area. Because of dry conditions, and in consultation with City Parks and Recreation staff, the project biologist and maintenance crew gave supplemental water to the seedlings. This supplemental water allowed the seedlings an opportunity to survive until natural rainfall began again, enabling the plants to grow and successfully flower in the spring of 2020. A total of 846 Thornmint plants grew at the site in 2020. This represented an increase of over 800 plants from the beginning of the project. Weed cover was reduced from about twelve percent to just over two percent at the end of the project.

Through partnerships between public agencies such as the City of San Diego and SANDAG and private groups like the Mission Trails Regional Park Foundation and San Diego Zoo, good conservation outcomes are possible.

ON TOPIC PRESENTATION

Rare Plant Conservation at Mission Trails Regional Park

Thursday, March 11, 6PM

MARK BERNINGER, Natural Resource Manager, City of San Diego

The Multiple Species Conservation Program (MSCP) was enacted in 1997 to preserve habitat and help conserve our region's spectacular biodiversity. More than 20 years ago, City of San Diego biologists started monitoring San Diego Thornmint (Acanthomintha Ilicifolia) as part of a groundbreaking Rare Plant Monitoring Program.

In 2017, the Mission Trails Regional Park Foundation was awarded a grant from the TransNet Program at SANDAG to engage local rare plant expert Mark Dodero and RECON Environmental to expand San Diego Thornmint populations in Mission Trails. The three-year project has ended and was a smashing success! The population of plants that once numbered under 100 individuals in 2017 blossomed to over 800 plants.

On **Thursday, March 11**, learn about this important restoration project and other rare and endangered plants at Mission Trails during on OnTopic online presentation with Mark Berninger, Natural Resource Manager, City of San Diego Open Space Division.

Participation is free but registration is required through www.mtrp.org/programs. For information, email events@mtrp.org.

2019-2020 MISSION TRAILS REGIONAL PARK FISCAL YEAR HIGHLIGHTS

Since its incorporation in 1988, the Mission Trails Regional Park (MTRP) Foundation has enriched the lives of San Diego County residents and visitors and has advocated for and helped to steward Mission Trails, one of the largest urban parks in the United States.

During the fiscal year that ended on June 30, 2020, Mission Trails welcomed more than 2 million visitors who hiked, walked, mountain biked, enjoyed the Visitor & Interpretive Center, and participated in educational public programs.

As reflected in the MTRP Foundation's mission statement, the nonprofit organization works in collaboration with the City of San Diego to preserve and protect the park and provide and promote educational and recreational opportunities.





Some The MTRP Foundation supports major park initiatives which, during the 2019-2020 fiscal year, included the **opening of the new 5,000-squarefoot ranger station in the East Fortuna Staging Area**. A major entry to the Fortuna area of the park, the completion of this long-awaited facility was a 21-year process of planning and park development funded by the City of San Diego and the MTRP Foundation. This important park investment gives rangers improved resources and a stateof-the-art facility to better protect the park and engage with park visitors.

AT LEFT AND ABOVE: The new ranger station in the East Fortuna Staging Area opened in February 2020.



Mefore COVID-19 caused Mission Trails to be fully closed for several weeks and has resulted in the continued temporary closure of the Visitor Center and Kumeyaay Lake Campground, the MTRP Foundation was experiencing a banner year. The activities included many sold-out public lectures, field trips for thousands of school children, the launch of a new Day Camp, and a collaboration with the Girl Scouts on two badge programs at the park. In addition, the MTRP Foundation supported the creation and completion of the new "Birds of Mission Trails" exhibit, educational panels along the trails, and produced The Rise and the Fall of the Mountains at Mission Trails Regional Park, a 20-minute film about the geology of Mission Trails featuring Pat Abbott, Ph.D. The film was set to debut in the Visitor Center theater but instead premiered online due to the pandemic. This outcome was fortuitous as the film has been used in educators' distance learning curricula to benefit youth near and far, from elementary school to college students.

BELOW: Though the program is currently suspended due to the pandemic, the park's volunteer Trail Guides provide educational walks to groups.

See One of the many ways the park benefits from the involvement of the Mission Trails Regional Park Foundation is the organization's funding for support of habitat and restoration projects. An example of this is a multi-year collaboration with the City of San Diego to **improve habitat and increase the populations of San Diego Thornmint in Mission Trails Regional Park**. Funded by the San Diego Associations of Governments (SANDAG), the grant allowed the MTRP Foundation to engage RECON Environmental to expand San Diego Thornmint populations in Mission Trails. Habitat maintenance and development projects are ongoing at the park, and most involve MTRP rangers working with volunteers. Funds from the MTRP Foundation are used to purchase plants and tools for such projects, as well as materials used for trail maintenance.



In 2019, the MTRP Foundation began coordinating
 the volunteers who staff the Visitor Center. All other park
 volunteers continue to be managed by MTRP rangers and
 other City staff. One highlight from 2020 was the park's Trail
 Guide Program having more interest than ever before, with
 56 nature-loving individuals signing on to become a trained
 guide to lead the park's trail walks. Alas, those who completed
 training and passed the exam have yet to guide any groups, but
 they will add to the corps of volunteers who lead the free walks
 in the park when the program resumes.





Before the Visitor Center closed in March due to the pandemic, the City and MTRP Foundation staged the **24th annual Volunteer Awards Celebration**, an opportunity to acknowledge the service of the 829 individuals who volunteered at Mission Trails in 2019. Collectively, the volunteers worked a total of 11,991 hours of service, the equivalent of an estimated \$360,000 according to www.independentsector.org. Due to the pandemic, the park's volunteer programs have been suspended since spring 2020, and we look forward to welcoming everyone back to the park when it's safe to do so.

After processing 15,000
finishers, the immensely popular
5-Peak Challenge came to an
end in June 2020. Conceived and
managed by MTRP rangers, the
Challenge brought many more
hikers to the park and provided the
opportunity for families, friends,
and colleagues to push themselves
to summit all of Mission Trails' five



peaks. To receive a certificate of completion and a 5-Peak lapel pin—provided by the Foundation—hikers took selfies at the summits. Though Mission Trails' program has ended, it has inspired the creation of many similar promotions, locally and outside of San Diego County. Mission Trails Regional Park is a wonderful place for children to explore the outdoors and learn to appreciate nature. Thanks to generous support from San Diego Gas & Electric and other donors to the MTRP Foundation, the organization has, over the years, welcomed



tens of thousands of school children to the park on field trips, and has **hosted thousands on overnight campouts at Kumeyaay Lake Campground**. Though many months of field trips scheduled for the 2019-2020 academic year were canceled due to the pandemic, the **MTRP Foundation welcomed nearly 2,000 children to the park from 37 different schools**. Our on-site educators provided an enriching experience that included engaging with the Visitor Center's exhibits, learning about local indigenous peoples from a storyteller, and taking a guided walk through the park. The Foundation provides bus transportation for groups coming to the park for field trips with both Foundation educators and MTRP rangers.

FISCAL YEAR 2019-2020 Public Programs and Events



Creating Habitat with California Native Plants Mike Evans, Tree of Life Nursery

Mission Trails Regional Park Bird Identification Workshops Millie Basden





Family Program: Mission Trails' Creatures of the Night

Two Who Survived Rose Schindler, Holocaust survivor and author



MTRP Foundation Donor Event

What a Difference a Year Makes: Tracking the Rare Plant Super Bloom Mark Berninger, City of San Diego Mystery Cat: Southern California's Elusive Mountain Lion Don Endicott



Holiday Marketplace at the MTRP Visitor Center which featured local artisans and others to support MTRP

Fundraiser for MTRP at Blind Lady Ale House





ONGOING MTRP Foundation Programs and Projects in Cooperation with the City of San Diego

- Oversight and management of the MTRP Gift Shop
- Coordination of the Visitor Center volunteers
- Support of City of San Diego volunteer program including volunteer recognition
- Maintenance and replacement of furnishings and equipment at park facilities
- Development, funding, and maintenance of educational exhibits
- Support of the City of San Diego-operated Kumeyaay Lake Campground
- Stewardship and cultivation of donors
- Management of the Mission Trails
 Regional Park website
- Electronic communications and social media content development
- MTRP newsletters, brochures, and promotion of the park and campground
- Educational field trips and support of City staff and volunteer education programs
- Art exhibitions at the Visitor Center







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This list reflects donations of \$500 and more made in 2020. Please contact the MTRP Foundation at mtrp@mtrp.org with any inaccuracies.

🗊 Denotes gift made through the San Diego Foundation.

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