





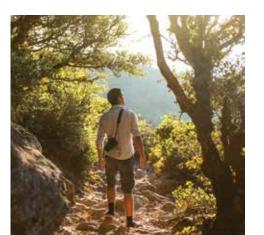
WE ARE EXCITED and honored to share this fourth annual report with you, outlining the continued accomplishments toward the vision we set in 2014. And more. More bats, bees, wildlife cameras, weed abatement, youth, and the list goes on. The pages ahead feature highlights and accomplishments from October 1, 2017 to September 30, 2018. Our partnership has expanded and so has the deep collaboration that is foundational to ensuring a resilient and healthy Mt. Tam in the future.

This past year One Tam received unprecedented levels of support from members, volunteers and community partners, with whom we share a commitment to protect Mt. Tam and its many treasures for future generations. We acknowledge agency staff, leaders, and board members—and especially the extraordinary Marin community, for embracing collaborative stewardship of the mountain.

We hope this report can inspire your continued interest and support of One Tam. Together, we have discovered so many ways in which to participate and give back to this very special place.

Sincerely,

The One Tam Executive Team



ONE TAM

EXECUTIVE TEAM

MAX KORTEN

Director and General Manager

Marin County Parks and Marin County

Open Space District

KRISHNA KUMAR
General Manager

Marin Municipal Water District

LAURA JOSS
General Superintendent
Golden Gate National Recreation Area
National Park Service

GREG MOORE

President & CEO

Golden Gate National Parks Conservancy

VINCENT ANIBALE

Acting General Superintendent

California State Parks

Bay Area District

THE OPEN SPACES ON MT. TAM

are a mosaic of interlocking protected areas primarily managed by four public agencies: the Marin Municipal Water District, National Park Service, California State Parks, and Marin County Parks and Open Space District. One Tam brings together these four agencies and the nonprofit Golden Gate National Parks Conservancy to support the long-term stewardship of Mt. Tam.



Pacific Ocean

Area of Focus State Park Golden Gate National Recreation Area

LEGEND:























RESTORING REDWOODS

"Our approach to bringing people together and really creating a cohesive vision is something that is extremely valuable to us not only as an agency but to the community we serve."

– Partner Staff

oy's Redwoods Open Space Preserve, part of Marin County Open Space District, offers visitors an immersive experience in an old growth redwood grove. Its redwoods are close in size to those of Muir Moods, making them some of the largest in the county. It was originally protected from development thanks to efforts of caring community members, and today remains a refuge to special status species, including the northern spotted owl. Yet, the preserve lacks a formal trail network, which has resulted in damage to the



Community members met with One Tam project staff at the Roy's Redwoods Field Day to learn and give input on restoration ideas for this special site.



HIGHLIGHTS 2017-2018

community members engaged through outreach events, guided hikes on the mountain, and presentations by

One Tam and partner staff to share our work

5

bioblitz events held at sites across the mountain where volunteers documented plant and animal species

134

community engagement events hosted or supported by One Tam staff

redwood understory vegetation and to the floodplain of Larsen Creek, which runs through the preserve.

One Tam, in partnership with Marin County Parks' staff, helped to convene a team of technical experts, and a stakeholder workshop to assess conditions at Roy's Redwoods and envision how to improve them. The goal of this community-based effort is to develop concepts that protect the preserve's resources, restore ecological function, and ensure a sustainable visitor experience. One Tam's

approach brings science, planning, and community together at every step. Critical to understanding the current conditions, we studied visitor use and access, hydrology, and biodiversity, all with opportunities for community members to share input.

Planning can also be fun! This spring we held a Field Day where community members were invited to learn about the findings of the visitor use survey and site analyses, and share ideas for enhancing the preserve. At a spring 2018 Bioblitz, participants and technical experts cataloged the extent of the grove's rich biodiversity, identifying more than 150 species in a single day, including four new species never before identified in the preserve. In addition, mammal populations are being monitored through the Marin Wildlife Picture Index Project, a volunteer-supported effort that uses motionactivated cameras to detect wildlife presence.

In the coming year, staff will put forward a restoration concept for Roy's Redwoods, rooted in science, place, and community, and begin to chart a way forward for this Marin treasure.

- 1 A team of botanists ground truths vegetation cover detected by remote sensing for the countywide vegetation mapping project.
- Serpentine barrens are surveyed across the mountain because they support specially adapted rare plants, like the Tiburon buckwheat.
- 3 Patches of grasslands are also being surveyed mountain-wide to understand which plants they contain, as they provide crucial habitat for birds and other animals, including badgers.
- One Tam's bee inventory will fill a crucial data gap about the mountain's all-important pollinators, which have never been studied at a mountain-wide scale.



135
roads, trails, and riparian corridors surveyed for priority weed species

400 priority weed patches treated











Our comprehensive study of bats will help inform habitat management toward protecting the region's 13 bat species.

SCIENCE AT SCALE

"As we take on big projects around climate change, it helps us feel like we're all together in this. There's a shared commitment to taking on these big challenges. We aren't chipping away at these things alone."

- Partner Staff

ne Tam's collaborative approach to scientific inventory and monitoring of Mt. Tam's resources helps agencies make better decisions around protecting the mountain's plants, animals, and natural communities. No plant or animal species, or stream or forest, knows where our individual boundaries start and end, and so we need to study them at the scale in which they exist in order to protect them. Not only does the efficiency of this work increase with collaboration, but a bigpicture view of the mountain's resources allows managers to prioritize efforts and allocate resources more effectively, and helps them plan for shifts in environmental conditions due to climate change and other stresses.

In the last year, we have worked specifically on several gaps in our knowledge of the mountain's resources that were identified in the 2016 Health of Mt. Tam effort. We've aggregated data from all partner agencies to understand how plants, animals, and ecosystems were doing across the mountain. These include a regional inventory of bats, bees, and a county-wide vegetation mapping project. Never before have these important animals been inventoried at this scale in the region, and vegetation mapping has not previously been done at a County-wide scale.

One Tam's Conservation Management staff has also continued its crucial work to inventory serpentine endemic species and grasslands. Its Early Detection, Rapid Response program inventories and targets priority weed species before they spread – all on a mountain-wide scale to provide a comprehensive benchmark to measure against in the future.



FROM BASE TO PFAK

"What's really impressed me is how much there was a desire and a need in the community for an effort like One Tam and how much it has brought the community in."

- Partner Staff

28
serpentine barrens
surveyed for rare
endemic plants

30 young adults mentored in place-based natural resources internships

weeping 360-degree vistas are a primary reason hikers visit the West Peak of Mt. Tam, and also what made it a strategic point in the region during the height of the Cold War. Still the highest point on the mountain by a few feet, West Peak was removed in 1950 to build the Mill Valley Air Force Station, now decades defunct. In 2017 a One Tam and Marin Municipal Water District (MMWD) project team assessed methods and concepts to inform the possible restoration of West Peak. The study engaged a range of stakeholders and represented ecological needs, community input, and technical constraints. The goal was to develop a concept that best served the needs of restoring rare serpentine vegetation communities, enhancing visitor safety and experi-

ence, and honoring the mountain's long history. A preferred concept was released in summer 2018, the culmination of more than 18 months of community engagement, input and technical studies. The next step in the process will be to bring the concept before the MMWD Board and invite public comment.

Like Roy's Redwoods, One Tam's approach to reaching the preferred concept for West Peak marries technical understanding with community input. Interpretive walks hosted by filmmaker and West Peak advocate

Gary Yost and MMWD Ranger Matt
Cerkel weave together history and
ecology, improving the public's
understanding of the site and possibilities for restoration. High school
students participating in One Tam's
LINC (Linking Individuals to their
Natural Community) summer internship program shared their ideas for
restoration in design charettes held
on the peak in 2017 and 2018. Visitor
surveys were also conducted to find
out why community members visit
the peak and what they thought
could be enhanced.



THREE YEARS AND FOUR MILLION IMAGES

"No one agency in the collaborative could do this project alone. And from a scientific perspective, the data really wouldn't help us with conservation if we just did it in one jurisdiction."

- Partner Staff

he Marin Wildlife Picture Index Project reached a big milestone this year, having surpassed four million photos cataloged and three years of data collection from 180 motion-activated cameras on the mountain. The project incorporates the largest number of cameras used within one region in North America, and is truly a community effort as photos are cataloged largely by volunteers. The Wildlife Picture Index is a statistical method used to understand wildlife presence, abundance, seasonality, and more, and needs at least three years of data to calculate.

With this camera data, land managers will be able to tell more about the overall health of the mountain's ecosystems. They will establish baseline population figures, including rare species, identify wildlife "hotspots" and crucial corridors for movement, get a better sense of the food web, and begin to assess trends in populations. For example, pre-

liminary results can tell us that some species like gray fox and bobcat have stable populations that are present year-round on the mountain, while coyote has some seasonal variation. Overall, species diversity for Tam's mammals is well represented, and abundance of small mammals and carnivores seems balanced. In the long run, the goal is to understand wildlife populations well enough to identify what healthy populations look like, identify early signals of distress, and avoid population declines. Wildlife live on a scale greater than any one of our lands, so One Tam's collaborative approach to this project is necessary for understanding and protecting them.

The program team presented preliminary results at "Tam's Wild Side," the October 2017 One Tam Science Summit, which brought together agency staff, scientists, students, and community members to learn about the health

of the region's wildlife and work happening to monitor and protect it. One Tam looks forward to releasing the three-year analysis, and what we can now say about the health of Mt. Tam's mammal populations, in late 2018. Data from this project will ultimately become part of a global database where they can be compared to other projects.

Reaching this milestone would not be possible without the hundreds of volunteers engaged by One Tam's Community Science Program Manager, Lisette Arellano. Through processing wildlife photos and participating in cataloging events, they learn about the mountain's wildlife and connect to a part of the mountain they typically don't see. Some volunteers also help maintain the wildlife cameras and collect the photos.













700,000

wildlife photos cataloged this past year alone by volunteers and staff, captured by 180 motion-activated cameras across two of the mountain's watersheds 229

volunteers participated in habitat and trail restoration work days 432

community members contributed to our science work this year

STAFF

Guided by the collective priorities of the One Tam Working Group, One Tam staff work closely with project and program managers from the five partner organizations. This year, One Tam's full-time staff doubled, as three new staff members joined to help expand and guide our conservation, community science, and community engagement programs.



Rosa Schneider Restoration Program Manager

Rosa runs volunteer habitat restoration programs that support the agencies at key sites, improving the health and function of the mountain's landscapes.



Marie Baeta Community Engagement Program Assistant

Marie now heads the One Tam Roving Ranger program, develops educational materials, and connects communities to our work and their local environment.



Janet Klein Community Conservation Programs Director

In this new managerial role, Janet oversees One Tam's community science conservation management, resource stewardship programs, and data systems.



Lisette Arellano Community Science Program Manager

Lisette joined the team this year to lead and expand the Marin Wildlife Picture Index and expand other opportunities for community members to engage in our science work.



William Hough Youth and Engagement Program Manager

William recently departed his role where he provided youth and adult volunteer programs connecting local communities to the mountain. Thank you and hope our trails meet again!



Rachel Kesel Conservation Management Specialist



David Greenberger *Conservation Management Technician*

Rachel heads One Tam's work to map and treat priority weed infestations mountain-wide. She and David Greenberger also support rare plant species monitoring and other vegetation inventory work.

Allison Titus returned for her second season as a Conservation Management Seasonal Assistant.









One Tam is a collaborative effort fueled by the work of over 100 staff from all five partners.

