

ONE TAM

2019–2020
REPORT TO THE
COMMUNITY





SUSTAINING OUR SHARED MISSION

One Tam surged into its seventh year with a slate of programs and projects reflecting the maturity and scale of our sustained partnership. Our collaborative effort was founded on the belief that we can accomplish more together, and while this conviction has been repeatedly validated over our first six years, the upheaval brought about by the global pandemic, societal changes, and this year's wildfires has underscored the necessity of working in coordination at a landscape scale. From collectively designing and maintaining a regional map on COVID-19 and fire-related public lands closures to reopening Stinson Beach amid the shelter in place orders to the multi-agency effort to shift our summer internship program online, our partners found ways this year to lift each other up and continue our collective work. We remain humbled and grateful for the ways in which this partnership is bolstered by support from One Tam members, supporters, volunteers, and community members like you. Thank you! Inside this report, you'll find highlights and accomplishments from October 1, 2019 to September 30, 2020. The stories featured here demonstrate our commitment to sustaining connectivity, supporting the resilience of Mt. Tam and growing our impact in the community during even the most challenging times.

Sincerely,
The One Tam Executive Team

ONE TAM

EXECUTIVE TEAM

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Director and General Manager
Marin County Parks and Marin County
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General Manager
Marin Municipal Water District

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Golden Gate National Recreation Area
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CHRISTINE LEHNERTZ
President & CEO
Golden Gate National Parks Conservancy

MARIA MOWREY
Superintendent
California State Parks
Bay Area District

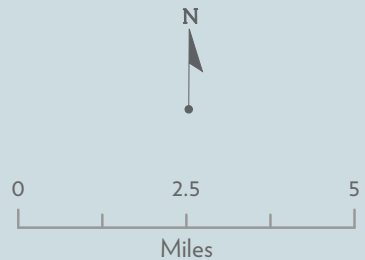
THE OPEN SPACES ON MT. TAM

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.



LEGEND:

-  Area of Focus
-  State Park
-  Golden Gate National Recreation Area
-  Marin Municipal Water District
-  Marin County Parks and Open Space District
-  Point Reyes National Seashore
-  Golden Gate National Parks Land Managed by Point Reyes National Seashore



RESILIENT FORESTS

Supporting healthy forests and reducing fire risk

The summer of 2020 has been an unprecedented fire year in California and we are all experiencing its effects. Here in Marin, the Woodward fire in Point Reyes National Seashore, ignited on August 18 and 95% contained as of this writing, burned approximately 5,000 acres. While our federal and local firefighters were able to prevent a loss of life and property, residents faced mandatory evacuations and all of us experienced park closures and weeks of poor air quality due to this and other fires around the state.

The conditions for a destructive fire event remain present throughout Marin. The One Tam partners are actively working with each other, Marin County Fire, and our surrounding communities on decreasing risk by clearing accumulated fuels, diseased trees and brush. “Many trees are diseased and dying from sudden oak death or pitch pine canker, and

young saplings that rely on fire to clear vegetation and open their cones are not able to regenerate. The result can be a dense thicket with lots of dead, dry vegetation, many small-diameter trees competing for space, water, and sunlight, limited diversity of mid- and understory vegetation, and few young tree seedlings.” says Golden Gate Parks Conservancy Senior Project Manager Caroline Christman. “In some locations, land managers can take a more active role to help improve forest health by removing dead vegetation and thinning the thickets of small-diameter trees or by using prescribed fire in small, controlled burns.”

In doing so, we are in turn improving conditions for many native species, particularly those associated with our declining oak woodlands and mixed hardwood forests. For example, One Tam’s forest health work adjacent to Potrero Meadow is a multi-benefit

project that decreases the risk of an explosive fire event while also improving hydrological conditions and the potential for native plant species to reestablish in sunny openings on the forest floor.

In addition, the *Marin Regional Forest Health Strategy for Public Lands* is incorporating lessons learned from this project and from the current fire season: the final report will identify potential restorative forest treatment actions and best practices that will improve overall forest ecosystem resiliency, reduce fire fuels, and can be shared among all One Tam partners.



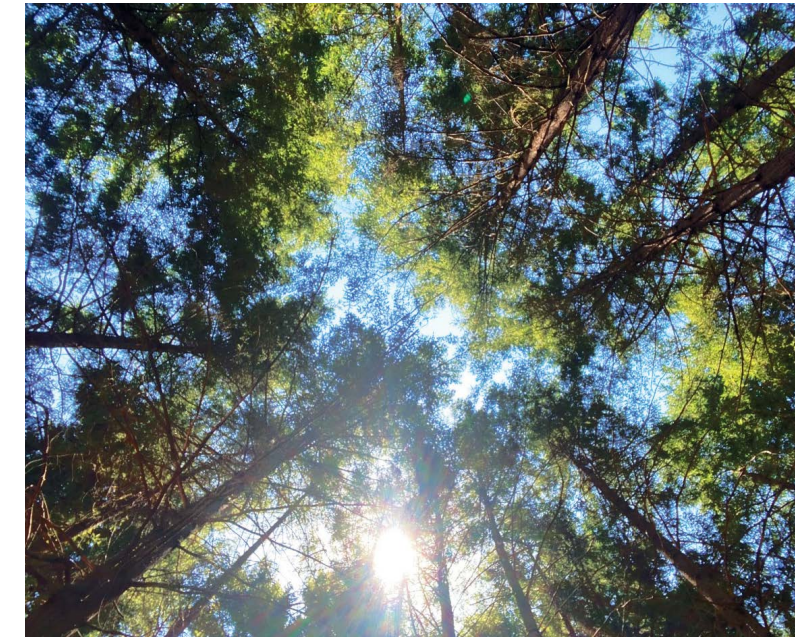
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- (1) MMWD’s Carl Sanders and Parks Conservancy’s Caroline Christman tour a treated forest site near Potrero Meadow.
- (2) A “snag” or standing dead tree left in place after forest health work. Snags are an important component in healthy forests and can provide habitat for many species of wildlife, insects, and fungi.
- (3) Near-final site conditions on the forest floor in the Potrero Meadow demonstration project area. Small woody debris is often left in place to prevent erosion.
- (4) Dappled light in forests provides important ecological functions.



EMPOWERING YOUTH AT A DISTANCE

Immersive summer youth program pivots online

LINC participants and staff adapted to the format of the 2020 program, including online meetings.

Identifying and fostering the next generation of park stewards is essential to sustaining One Tam's work. Our Linking Individuals to their Natural Community (LINC) program offers high school students the opportunity to get out in nature with partnership staff and gain a wider understanding of our public lands. Or at least it does in a typical year.

Within days of the regional shelter in place order, LINC program leaders knew they would need to develop an entirely new program. But the leadership team also knew they couldn't simply ask 22 students from five counties to sit through video lectures and hope their bonds with nature would grow. They had to adapt to the pandemic.

What followed was a pivot led by Golden Gate National Parks Conservancy staff to get the students out into the community and learning while also respecting public health guidelines for outdoor activity.

Regular learning sessions with staff from across the partnership still took place over video, but they were used to set up outdoor explorations and learning sessions including species identifications, park cleanups and shared projects in participants' neighborhoods. As One Tam Youth Program Manager Grecia Pacheco observed, "we gave our LINC participants agency about how to complete their projects, and students responded to this freedom with creativity and individuality."

The group was inspired by social justice conversations and civil unrest happening across the country. After hearing untold stories of the parks and learning from a diverse environmental career panel, participants collaborated on community agreements to inform their work on public lands and their pledge to truly make parks accessible and welcoming for all.

"It is essential to have these conversations because it is a crucial step in creating a more inclusive and diverse field," observed one participant.

At the culmination of the four-week program, students met with One Tam partner staff in a mentoring session. They discussed the ways they'd grown personally and professionally in the program and how the lessons they'd learned at LINC might influence their future career choices.

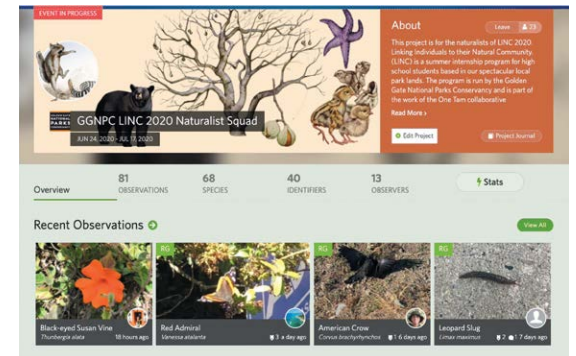
"I can confidently say that LINC has changed my life. Before the program, I was so confused on what I wanted to do in the future, but LINC has made me realize that an environmental career is a path for me," said one 2020 intern.

Thanks in part to LINC, the next generation of Bay Area land stewards is already taking root.

Participants took part in outdoor exploration and learning sessions including species identifications, park cleanups and shared projects in participants' neighborhoods, following local health department guidelines.

"I can confidently say that LINC has changed my life."

— LINC participant



Observations made of Mt. Tam flora and fauna submitted to iNaturalist contribute to our understanding of biodiversity on Mt. Tam, and also form part of a global biodiversity database. These observations were made this year by One Tam staff: (1) Black-tailed bumble bee (*Bombus melanopygus*) by Lisette Arellano (2) Coyote (*Canis latrans*) by David Greenberger (3) Leopard lily (*Lilium pardalinum* ssp. *pardalinum*) by David Greenberger (4) Western jack-o'-lantern (*Omphalotus olivascens*) by David Greenberger



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SUSTAINING CONNECTIONS

Community science offers paths to connect to nature and to each other

Connectivity with the community is central to the One Tam mission, but the cancellation of in-person gatherings due to Covid-19 has disrupted some of our most effective and direct pathways for engaging with those who support our work. In the field of community science, however, technology has advanced to meet the moment and sustain connections with those who share in our work.

In recent years, online platforms and communities like iNaturalist and Seek—developed by the California Academy of Sciences and National Geographic—have powered our bioblitz events, allowing trained and amateur biologists alike to share and verify findings

that might previously have been left in an individual's photo collection.

“To me, iNaturalist is the promise of the internet fulfilled,” says One Tam Community Science Program Manager Lisette Arellano, whose team leads bioblitzes throughout the year.

Community members and collaborators from the California Academy of Sciences were able to connect at two fungus-focused bioblitzes prior to shelter in place. The team has adapted rapidly since then and partners from the five One Tam agencies rallied to create virtual programming and publicize City Nature Challenge and California

Biodiversity Day as ways for people to stay connected to each other and to our natural world amid the pandemic. Individuals were encouraged to responsibly go out into nature and identify species.

Arellano and other “iNat” experts are now beginning to see trends emerge from over five years of data collection in the One Tam area of focus. In the future, these findings may help influence our stewardship strategy, and in the present, they are keeping our staff and community connected and focused on the health of the natural world.



Setting up a mist net with USGS bat biologist Gabriel Reyes in preparation for a nocturnal bioblitz in late 2019.



One Tam team members Rachel Kesel, David Greenberger, and Michael Sturtevant remove thoroughwort (*Ageratina adenophora*) near Bootjack Campground in Mt. Tamalpais State Park in 2019.

Boxelder bug hatch on native mugwort at Lagunitas Creek.



EARLY DETECTION RAPID RESPONSE

Getting into the weeds at a landscape scale

Managing weeds is critical to protecting Mt. Tam’s unique plants and animals. The four agencies that directly manage the lands on Mt. Tam have been working independently for decades to try to stay ahead of the curve on invasive weeds, but with limited capacity and weeds arriving regularly, the challenge looms large. What’s more, plants don’t see property lines.

Taking a mountain-wide perspective on the problem, One Tam’s Early Detection Rapid Response (EDRR) program unites all of the agencies on Mt. Tam to find and treat weed infestations when they are just getting a foothold, keeping them from becoming a bigger problem in the future.

The program does this by identifying which invasive species are the highest priority, finding and treating patches of these high-priority weeds, and then sharing these data with all four One Tam partners and with

the public. The declining need for year-to-year control for several high-priority species shows that the program is working. Having a cross-jurisdictional team that understands and supports each agency’s needs has been essential to this success.

While the team is no stranger to treating weeds in tough-to-reach spots, working during the pandemic is new terrain altogether. New procedures, staffing plans, and safety concerns, compounded by smoky conditions and red flag closures, make 2020 a difficult time to do field work. The team has met these challenges with a spirit of adaptability and care for one another, doing as much as they can to keep this critical work going under these unpredictable and changing conditions.

This year, the program released *Early Detection Beyond Boundaries*, a synthesis of the first four years of its important work (2014-2018). This milestone, authored by Rachel

Kesel and David Greenberger, who initiated and built the One Tam EDRR program, details how the work is done and what we know about invasive species distributions on Mt. Tam. It also describes survey and treatment efforts to date and strategies for addressing widespread weeds that can be used by others who may be interested in starting a similar program of their own. You can read the full report at onetam.org.

“The idea that we can prevent the next French broom or other really problematic weed on the mountain through this work is really rewarding,” said Kesel. “Plus, treating weed patches while they are still a manageable size potentially saves One Tam partners thousands of dollars every year, over decades of weed removal efforts.”

The benefits to both the mountain and to One Tam’s partner agencies are well worth the early investment, to be sure.



One Tam staff, interns, and volunteers restore habitat at Creekside Marsh in late 2019.

THANK YOU!

Staff, partners, community members,
and volunteers

The One Tam partnership is fueled by the work of over 100 staff from all five partners, now including more than 10 One Tam-funded staff who work closely with project and program managers from the five partners to meet annual goals guided by the collective priorities of the One Tam Five-Year Strategy.



A One Tam team restores habitat on Azalea Hill in late 2019.

ONE TAM



MARIN MUNICIPAL
WATER DISTRICT



Learn more about One Tam, get the latest information about our projects and programs, and find out how to get involved at onetam.org.