

Conservation in Action

Fall 2025



Carlos Porrata

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Helping young people build confidence in telling the stories that matter

Welcome to All Hands Ecology

This newsletter is our first to arrive with our new name – All Hands Ecology – and represents a new chapter for our beloved 63-year-old organization.

While we say goodbye to the name Audubon Canyon Ranch, we sit in awe and appreciation of all the people who have built this organization into what it is today – a welcoming community of people who are dedicated to questioning assumptions, taking risks, prioritizing care for the planet and each other, and welcoming wild ideas – all to create a world where the diversity of life thrives, and nature benefits all.

All Hands Ecology is people – members, supporters, volunteers, partners, board, and staff – who are taking collective action to heal ecosystems and all the life they support.

All Hands Ecology is aspirational – we need more hearts, hands, and minds with diverse worldviews and lived experiences – and we are committed to being welcoming, sharing, and co-creating.

All Hands Ecology is joyful – we play, are curious, and value humor, because not only does it make the work more fun, but it provides the energy we need to carry on as we keep working towards a more resilient future.

I want to personally welcome you to All Hands Ecology and thank you for your support. We can't do the work without you, and there is so much work to do. Let's go.

With grit and gratitude,



Tom Gardali, CEO



Bookmark our new website address!

Join us for expert-led hikes, individual exploration, trainings, and volunteer opportunities!

allhandsecology.org →

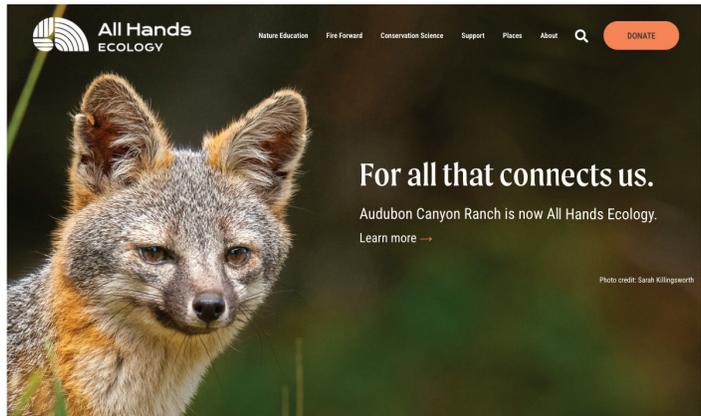


Photo: Sarah Killingsworth



Clockwise from top left: Cohen Maxwell, Zander Ockenden, Ben Grove, Oli Ferron, Chloe Wanaselja, and Maxi Green. Prescribed fire apprentices participate in an 11-month program January through December. Photo: Erika Lutz

Connecting the dots: Mountain lions and roads

by Anne C. Mitchell, communications specialist

Driving the scenic routes of the North Bay, winding backroads cut through lush valley bottoms, traversing year-round streams. Atop ridges, vistas reveal green islands of oaks in a sea of golden grasslands, punctuated by human development – houses, fencing, vineyards, buildings, and highways.

For wildlife, habitat connectivity – the ease with which animals can move through a landscape – is critical for finding food, shelter, and mates. Roads can be detrimental to this ease of movement, drawing indiscriminate lines through home ranges.

To understand the factors influencing the survival of North Bay mountain lions, we are studying how these apex predators are affected by roads.

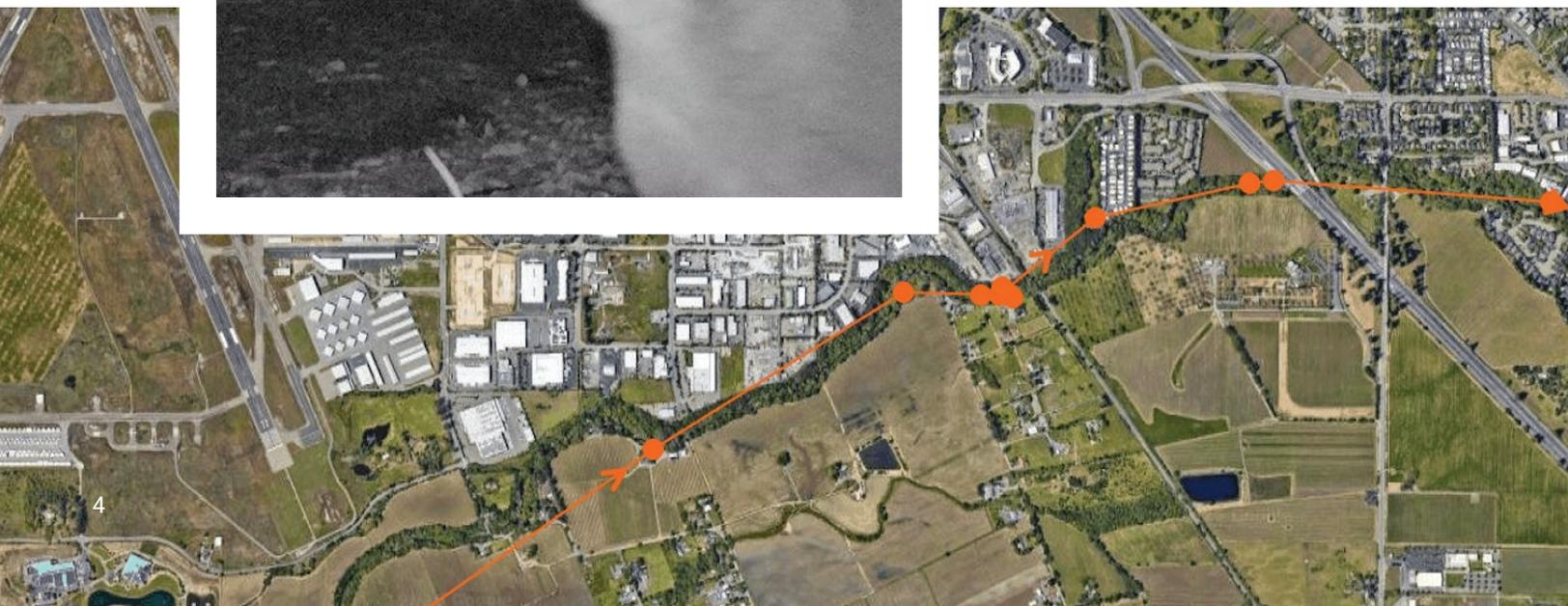
Roads threaten mountain lion survival

“Research in Southern California has shown that roads can have highly detrimental impacts on mountain lions, separating and isolating populations, increasing the risk of local extinctions,” explained Dr. Quinton Martins, Living with Lions principal investigator.

Mountain lions have some of the most expansive home ranges of any terrestrial mammal in North America – more than 100 square miles for a male lion. In crossing roads, they face the risk of vehicle collision. Roads can also have broader impacts on lions – dividing their habitat into isolated patches – affecting survival, genetic health, and coexistence with human communities.



Left: A trail camera in Sonoma County picks up a lion at the edge of a road. Below: GPS points of a lion on the move show a number of street and highway crossings facing the animal as it skirts industrial and residential areas by way of a narrow creek corridor.



GPS data from collared mountain lions in Sonoma Valley and western Napa County reveal “hot spots” for road crossings.

A new study on road crossings

“Northern California currently does not appear to be as adversely affected by roads as compared to Southern California. However, studying the impact of roads on our local population will help us better understand the challenges mountain lions face here, allowing for future mitigation strategies,” shared Martins.

We analyzed road crossing data from 22 GPS-collared mountain lions in Sonoma and Napa counties between 2016–2023 to understand correlations between where lions cross roads and the characteristics of the roads and habitat.

Connecting the dots

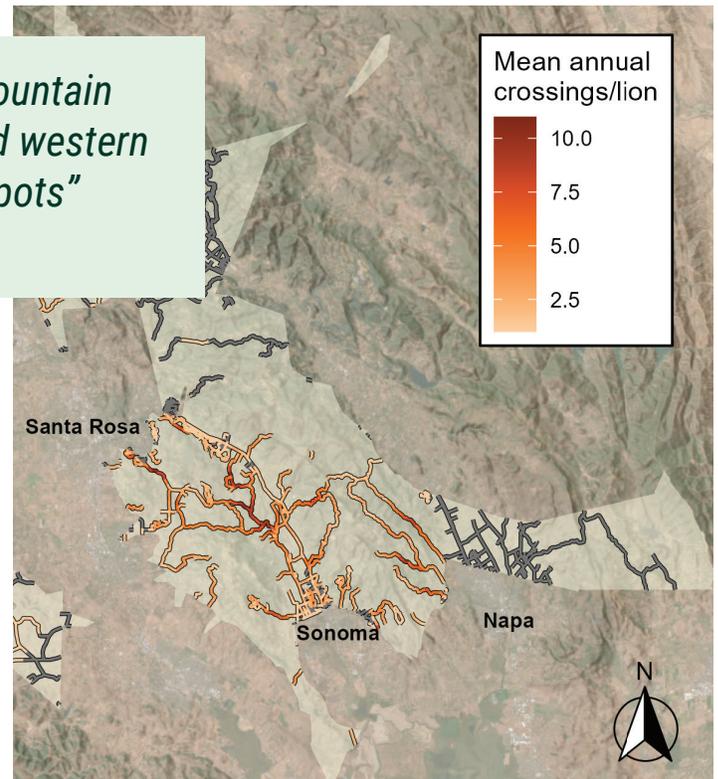
“All mountain lions favored crossing roads with less traffic, but females avoided the busiest highways much more strongly than males did,” explained qualitative ecologist Scott Jennings, who is partnering with Martins on the study. Jennings found that both male and female mountain lions were more likely to cross roads where patches of forest and brush were more connected to each other. Another finding was that bridges and culverts are strongly related to road crossing locations – features which often are associated with creeks and vegetation.

After the research analysis is complete, a paper will be submitted for peer review and publication.

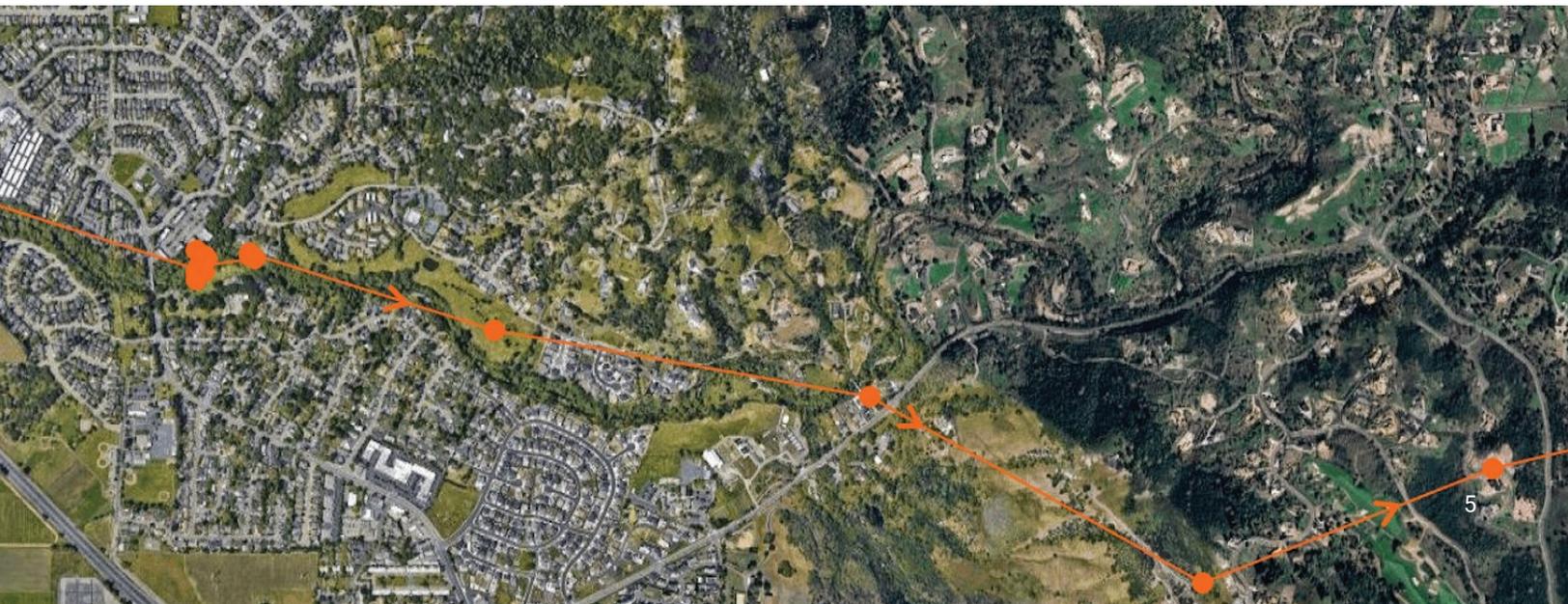
Understanding habitat connectivity

This study is one piece in the larger effort to understand how mountain lions move through a mosaic of public and private lands. By mapping these connections, we can identify vital wildlife corridors and promote conservation efforts that keep these landscapes, and the lions that depend on them, thriving.

See the latest lion updates on our social apps @allhandsecology →



Map: Scott Jennings. Data sources: ESRI



Apprenticeships are creating career pathways in conservation

by Anne C. Mitchell, communications specialist



Apprentices are trained to operate chainsaws and other stewardship tools and gain confidence while on field assignments. Photos: Erika Lutz

Viable career opportunities in conservation are essential for addressing the social, ecological, and economic challenges of our times. According to a 2023 California Natural Resources Agency report, California will need an estimated 100,000 new workers in nature-based careers by 2035.

Yet access to this growing sector is not equitable. People from communities historically underrepresented in conservation face barriers to entry, since much of the training and experience needed is unpaid and time intensive. Training that includes compensation helps remove obstacles, opening pathways to people from all backgrounds.

Our paid apprenticeships are an investment in people – restoring landscapes, responding to climate change, and building economic vitality along the way.

Stewardship apprenticeship program

We're excited to launch a new six-month pilot program – with housing included – that opens doors for young adults who may not otherwise have access to careers in conservation.

Supported by a grant from Parks California, the program offers apprentices hands-on experience in facilities management, land stewardship, and California Naturalist training, preparing them for thriving careers in California State Parks or similar settings. Through the process, apprentices will gain confidence, practical skills, and professional networks – working closely with mentors who are deeply invested in their futures.

“Programs such as these are critical for workforce development and can be fundamental for skill development, mentorship, and community – not always



“Programs such as these ... can be fundamental for skill development, mentorship, and community – not always available for young adults from historically excluded communities.”

– José G. González, founder of Latino Outdoors and equity officer for the East Bay Regional Park District

Prescribed fire practitioners Chase Whitener (left) and Marty Malate (right) began their careers at All Hands Ecology through the prescribed fire apprenticeship. Photo: Erika Lutz

available for young adults from historically excluded communities,” said José G. González, founder of Latino Outdoors and equity officer for the East Bay Regional Park District.

After one week of opening the job to applicants, we received over 200 applications, validating the profound need for programs like this in the conservation field, as well as the desire among young people to be of service to the land.

Prescribed fire apprenticeship program

Since our prescribed fire apprenticeship launched in 2023, 15 apprentices have been hired in the 11-month program. Working alongside mentors with impressive skillsets and vast experience, apprentices receive well-rounded training in wildland fire, prescribed fire, stewardship, leadership, ecology, and community building. The program offers multiple career pathways, including forestry, fire agency, fuels management,

prescribed fire, land management, community advocacy, and education.

Apprentices from the prescribed fire program have gone on to work for organizations and government entities, including water agencies, global nonprofits, the National Park Service, and regional conservation districts. Apprentices have also been promoted as prescribed fire practitioners for our Fire Forward program.

Chase Whitener, an apprentice from 2024, was hired as a prescribed fire practitioner in 2025 and shared these thoughts: “The apprenticeship was a beautiful training ground. Being a practitioner really means putting foundational skills into practice. Stepping into leadership is a big part of what’s drawing me back.”

The prescribed fire apprenticeship is made possible by support from by CAL FIRE, the Farley Family Charitable Foundation, an anonymous philanthropic donor, family foundations, and generous individuals.

Learning to tell the stories that matter

by Anne C. Mitchell, communications specialist

“In the summer of 2022, a teammate of mine injured her ankle while practicing with the rest of our team on artificial turf,” begins Maryam Maskatia’s StoryMap project from the Conservation Science Intensive (CSI), our annual residential camp held at Martin Griffin Preserve in West Marin.

During CSI, Maskatia discovered the powerful ways in which stories, including her own, can impact change. The skills Maskatia gained in the program helped her share her story more confidently and add her voice to an important public debate in her Palo Alto community.

Her story

For Maskatia, soccer is more than a hobby; it’s at the center of her world. When a debate started about whether to build sports fields from artificial turf or grass, Maskatia had a vested interest in getting involved.

“The topic is really relevant to me and a lot of my friends,”

Maskatia shared. “The fields are right by my house, and I practice there three times a week.”

Maskatia could see there were important viewpoints missing from conversations in the community.

“I hadn’t heard anyone at the soccer club talk about the environmental side or safety,” Maskatia recounted.

An opportunity

As a busy high school student, it hadn’t been easy for Maskatia to find the time or the venue to articulate her thoughts on the debate. CSI provided an opportunity and training, empowering Maskatia to tell her story.

Catie Clune, director of education, shared: “We design trainings in CSI that help young leaders build confidence in sharing their own stories, while also revealing storytelling as a powerful tool for conservation and a force for lasting change.”



Left: Digital storytelling platform ArcGIS StoryMaps proved an easy-to-use format to tell the story about grass vs. artificial turf in a format that can be easily shared with others, including policy makers. Right: 2025 Conservation Science Intensive participants, including Maryam Maskatia (pictured at far right) explore Duxbury Reef near Bolinas during one of the outings. Photo: Catie Clune



During the weeklong CSI course, students were introduced to storytelling through workshops in communications, photography, and the web-based, multi-media platform ArcGIS StoryMaps, which students used to develop a final project.

Over the course of creating her StoryMap, Maskatia researched the environmental and safety implications of sports field surfaces and collected photos.

A community resource

Maskatia plans to share her StoryMap with people in her soccer club, the consulting group working on testing different field surfaces, and decision-makers at the city level. She has also identified another high school soccer player as a potential collaborator.

New perspectives

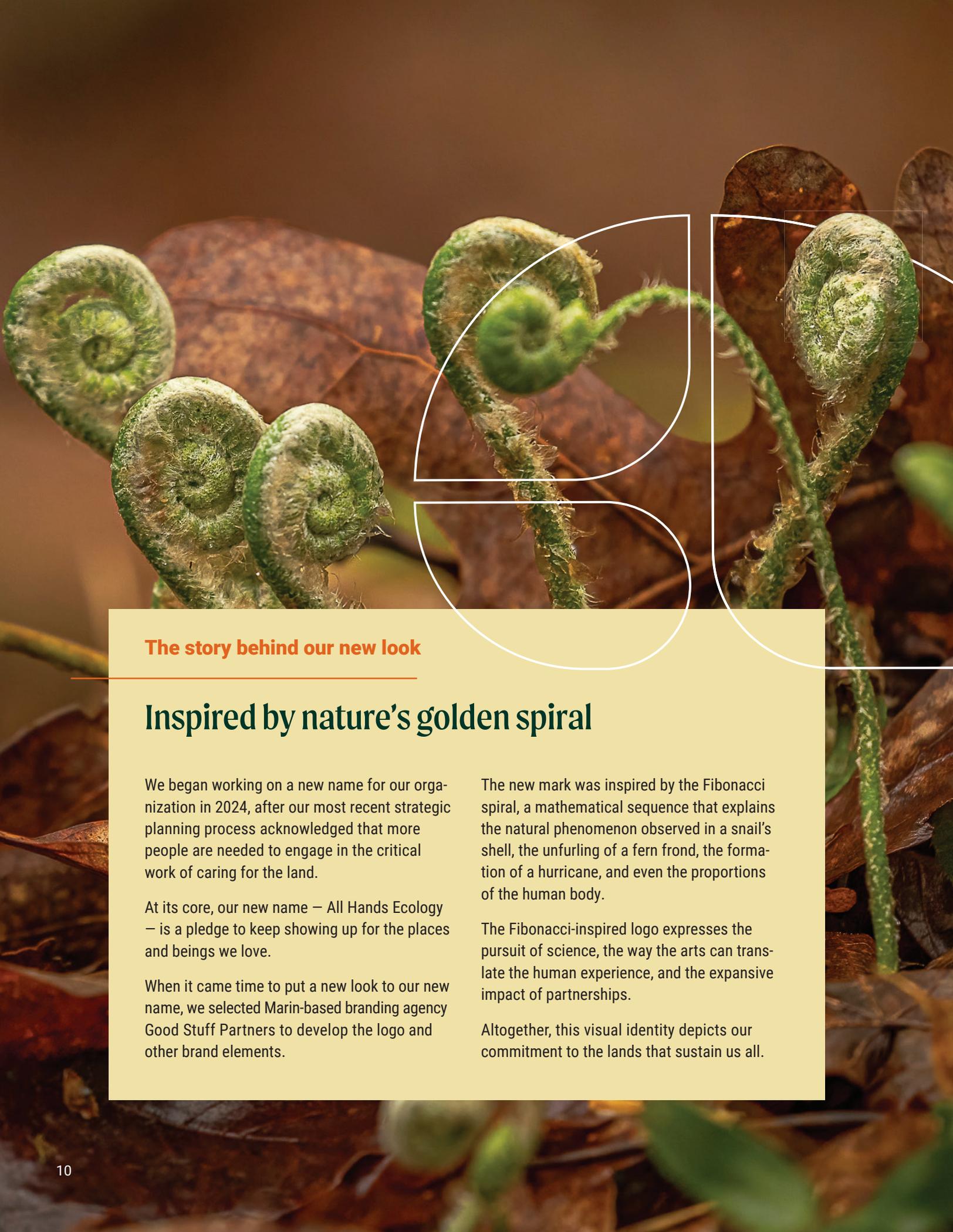
Throughout this process of her CSI project, Maskatia's thoughts about storytelling have expanded and deepened.

"Sometimes scientists communicate with a whole bunch of data, but maybe that isn't actually helpful when they're trying to convey something to a broader audience," Maskatia shared. "Including storytelling can reach and resonate with a greater group of people."

Read Maskatia's story, *Green Grounds*, at bit.ly/493TthN →



Above: Maryam Maskatia moves the ball down the field during a game played on artificial turf. Photo courtesy of Maryam Maskatia.



The story behind our new look

Inspired by nature's golden spiral

We began working on a new name for our organization in 2024, after our most recent strategic planning process acknowledged that more people are needed to engage in the critical work of caring for the land.

At its core, our new name – All Hands Ecology – is a pledge to keep showing up for the places and beings we love.

When it came time to put a new look to our new name, we selected Marin-based branding agency Good Stuff Partners to develop the logo and other brand elements.

The new mark was inspired by the Fibonacci spiral, a mathematical sequence that explains the natural phenomenon observed in a snail's shell, the unfurling of a fern frond, the formation of a hurricane, and even the proportions of the human body.

The Fibonacci-inspired logo expresses the pursuit of science, the way the arts can translate the human experience, and the expansive impact of partnerships.

Altogether, this visual identity depicts our commitment to the lands that sustain us all.



Find us online at our new social media handles

On Facebook, Instagram, Vimeo, YouTube, and LinkedIn:



@allhandsecology →

Also on Instagram:



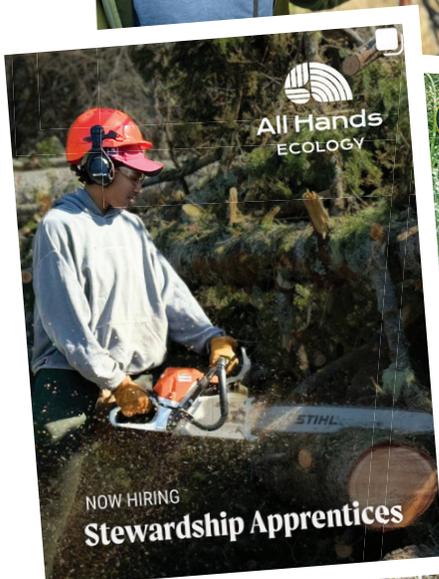
@fire.forward →



@lwl_trailcameraproject →

eNews

If you previously subscribed to Audubon Canyon Ranch's monthly eNews, there is no need to resubscribe, just add our new email address – info@allhandsecology.org – to your contacts list to make sure it lands in your inbox. *Not sure if you have subscribed?* Sign up here: allhandsecology.org/sign-up-for-enews →





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Above: Director of Prescribed Fire Julia Berkey ignites grasslands at a prescribed burn at Bouverie Preserve in Glen Ellen.
Photo: Erika Lutz

Get to know Julia Berkey, director of prescribed fire

“Frogs brought me to fire...”

This fall, we welcome Julia Berkey as the director of prescribed fire. Berkey comes to All Hands Ecology from Montana, where she has worked for the state creating fire-adapted communities and landscapes. Her focus there was to increase the pace and scale of prescribed fire, pass legislation to allow for the creation of a Certified Burn Manager Program, and host the state’s first-ever prescribed fire training exchange.

“This is the dream job. I’m very excited to work with a place-based organization, to create meaningful change at a local level,” says Berkey.

“Working with an organization that places people and ecology at the forefront together, with a significant focus on community and partnerships, is exactly where I want to be.”

Online: our interview with Director of Prescribed Fire Julia Berkey →

Send us a note

Feedback welcome

Conservation in Action, published twice yearly as a benefit to our members, supporters, and volunteers – features our latest stories of conservation through captivating imagery, personal reflection, and the science that informs our mission.

Your feedback is welcome and will help us improve your member experience. Please send your comments or suggestions to Director of Communications Wendy Coy at wcoy@allhandsecology.org

Address change? Please email support@allhandsecology.org

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