## **Conservation** in Action



Fall 2022

"The creek was really peaceful and exciting at the same time."

"Finding a deer skull because I have never found a deer skull before."

"I ate in nature and that was new to me."

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A trio of tools will help monitor movement and migration of our wild neighbors

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Efforts on our preserves to increase diversity of species for thriving ecosystems

#### Fall 2022 | Issue 67

### Why we are investing in beneficial fire and the people learning to work with it

Good fire is a connecting thread in California's bold initiatives to achieve environmental, public health and safety, and equity goals. Yet while it is now accepted that beneficial fire is needed to restore biodiversity, prevent catastrophic fires, stabilize carbon, and promote public health and safety, policymakers have been slow to deliver on lasting jobs in the field.

We must invest in good fire and the people who are skilled to bring it.

Audubon Canyon Ranch was awarded a \$2 million grant from CAL FIRE to hire and train a five-person prescribed fire crew for year-long posts, recurring through 2025.

These new apprentices will complete fire training courses and leadership skills as prescribed fire practitioners including planning, implementing, and monitoring prescribed fires. The graduates will be well-positioned to step into new prescribed fire careers.

This is an exciting time. Thank you for supporting Audubon Canyon Ranch.

Tom Gardali, CEO

#### egret.org

Naturaleza y ciencia para todos. Updated website makes nature and science more accessible

Explore online  $\rightarrow$ 







Sashwa Burrous

## Fall and winter provide important window for use of prescribed burning

#### North Bay TREX will tackle a long list of prescribed fire projects in the queue

This fall, professional and volunteer prescribed fire practitioners, landowners, and others will take part in the North Bay TREX, the second regional prescribed fire training exchange (TREX), a national framework for learning from each other and building awareness of shared resources.

Most weekends from mid-November through mid-January, expect to find these hardy and dedicated folks conducting prescribed burning in North Bay habitats, including redwoods, oak woodlands, and grasslands.

#### Fire activity will increase at Martin Griffin Preserve

Prescribed burning to restore coastal prairie and improve redwood habitat on multiple ridges of our Martin Griffin



Preserve in Stinson Beach will also continue this fall.

A decade-long plan for restoring fire stewardship will help reduce hazardous fuel levels in redwood understory, throttle back Douglas fir and coyote brush encroachment in remnant grasslands, and promote more plant diversity throughout the targeted units.

## As the pace of beneficial burning picks up, so will the smoke

As we work to address a century of fire suppression, we will initially see more smoke from prescribed burns. However, the result of this work will be a decrease in the smoke we experience over time. And, a growing body of studies show that prescribed fire smoke contains far less harmful particulate matter than wildfire smoke. Learn more at fireforward.org.

If there is smoke in your area, you can take action to reduce your exposure:

- Know when prescribed fires are happening in your area – follow us on social media at @fire.forward and @auduboncanyonranch.
- Use an air filter at home.
- Plan ahead to be outside less or decrease your physical activity if local air quality is poor.

A prescribed burn of Douglas fir understory on the Martin Griffin Preserve in 2019. Photo: Rovan Sanders



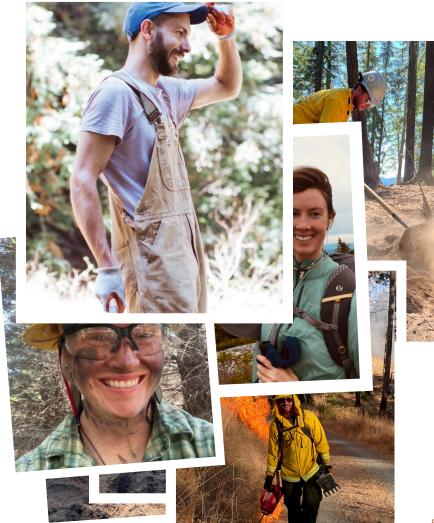
# Sashwa Burrous

#### Fire Forward Fellowship, class of 2022-23

"I am a land-steward of Bellwether — a cultural revitalization project in the coastal mountains of Northern Sonoma county in Kashia Pomo territory. I have been sponsored by the Kashia (as a nontribal partner) to join the Fellowship in order to support the rematriation of cultural burning practices to tribal territory. ... I dream towards a time when intimacy with prescribed burning [will] be normalized as an integral part of living within this ecosystem — not just for fire specialists. I applied to join the Fire Forward Fellowship specifically because of the way Fire Forward is organizing and teaching prescribed fire practices to everyday 'unqualified' people."

–Jiordi Rosales

Read more perspectives from the Fellows on Instagram @fire.forward  $\rightarrow$ 



#### **Nature Education**

## Developing skills to study and steward natural systems

by Jacqueline Levy, Bouverie Preserve education program manager

"Renewed" and "reimagined" describe environmental education at Audubon Canyon Ranch today. While facing the challenges of connecting children to nature during the pandemic, we explored new ways of interacting with classes by developing virtual visits to both Bouverie and Martin Griffin Preserves. We created standards-aligned lessons for teachers that focus on developing the skills to do science, not just learn content. We have reemerged with a cohesive program that connects the classroom to the trails of the preserves.

This fall, teachers planning to bring students to the preserve will teach observation skills to their students before their field trip. Many of the students will also have a virtual visit to Bouverie Preserve that will give them the opportunity to use their observation skills to answer the question, "What living things rely on oak trees?" Children discover they are scientists every time they ask a question about nature and use their own observations to uncover the answer. When the children arrive at the preserve, they are ready to explore nature firsthand with guidance and support from education docents.

Right: a young learner observes an echo blue butterfly while on a class hike. Below: A doe and fawn are snapped by a Bouverie Preserve trail camera. The experience does not end when students return to the classroom. After the field trip, students can reflect by creating a drawing that recounts their time on the preserve. A week later, the docents follow up with a virtual classroom visit so students can share their drawings and ask follow-up questions.

The follow-up visit also allows us the opportunity to survey the children about their experience. Last



30% of schoolchildren visiting our preserves reported that it was their first time in nature.

spring, we piloted the follow-up virtual classroom visit and the student survey. From the survey, we learned that for 30% of the children the field trip to the preserve was their first time in nature. Most of the children reported being happy and excited, as well as practicing their observation skills and learning about nature.

Our expanded experience supports students as they develop skills to observe and query what they see on their walk, then connect more deeply to what they are learning in the classroom and seeing in their own neighborhoods.



photo: Northern Flicker by Di Fritz



### Nature provides a respite for children with incarcerated parents

by Catie Clune, Martin Griffin Preserve education program manager

This fall, we will welcome Project Avary to our overnight accommodations at Martin Griffin Preserve in Stinson Beach. Project Avary helps children heal from the impacts of having a parent in prison. Supported by a community of peers, alumni counselors, and adult mentors, the children develop leadership skills so they can break free from generational cycles of trauma and incarceration. Project Avary has been supporting children of incarcerated parents for more than two decades.

Learn more at projectavary.org  $\rightarrow$ 



## Gaining ground to monitor the movements of our wild neighbors

by Katie Rogers, communications specialist



Top: Western Sandpiper by Nils Warnock, Mountain lion P39 and a cub by Quinton Martins. Bottom: Three black bear cubs captured by a Modini Preserve trail camera.

A trio of tools — trail cameras, radio towers, and GPS collars — are helping to increase our understanding of when and where animals are moving through the area.

Sonoma County residents have joined the network of more than 100 trail cameras to monitor the population of the region's big cats, as well as tally numbers of other wildlife as part of our Living with Lions trail camera project.

#### Follow on Instagram @LwL\_trailcameraproject →

We also continue to contribute data from several trail cameras placed on our Modini Preserve to Pepperwood Preserve's effort to survey wildlife diversity in the Mayacamas mountains. Bear cubs are the most recent subjects to garner grins from staff collecting photos from the cameras.

#### See the cubs in action: https://vimeo. com/751814497 $\rightarrow$

We've installed three Motus towers on our preserves (and helped others in Northern California install theirs), expanding the network that helps us track two shorebirds – dunlin and western sandpipers – whose populations are declining.

Read more about California's growing Motus network: https://bit.ly/3S1C3qY →

continued on next page



### Partnering for impact

Audubon Canyon Ranch has recently contributed to conservation documents at the local, regional, and national scales on topics that range from creating climate resilience in Sonoma County to the conservation of our nation's birds. We contributed our expertise on topics ranging from stewardship to conservation strategies and synergies.

#### Ecological Applications $\rightarrow$

#### Waterbirds →

CA Central Coast Joint Venture 2022 Implementation Plan  $\rightarrow$ 

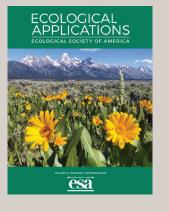
Restoring the Estuary to Benefit Wildlife and People, 2022 Implementation Strategy  $\rightarrow$ 

2022 U.S. State of the Birds Report  $\rightarrow$ 

Sonoma County Climate Resilient Lands Strategy  $\rightarrow$ 

Our Living with Lions co-partner, True Wild, placed a GPS tracking collar on the thirty-ninth lion in our collaborative study, a female with three kittens in tow in western Sonoma County. In recent months, we lost one collared lion to a car strike and one killed by a landowner.

Watch video of P39 and her kittens: https://vimeo. com/745159745  $\rightarrow$ 









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Sonoma County Climate Resilient Lands Strategy



#### **Stewarding Lands**

## Disrupting the status quo to help ecosystems thrive

by Katie Rogers, communications specialist

Removing and burning plants may seem antithetical to land stewardship, but this is just what our land stewards and resource ecologists were up to this summer. The varied stewardship strategies employed across the preserves share the same goal: increasing the diversity of species for thriving ecosystems.

#### Controlling Cape-ivy is a long game

Volunteers continue to pull up the roots of Cape-ivy (*Delairea odorata*) along the creek in Volunteer Canyon at Martin Griffin Preserve — a project that has been ongoing for eight years. Cape-ivy was introduced in the 1960s as an ornamental plant and quickly became problematic. The dense vines can suffocate plants and are toxic to animals and fish.

Resource Ecologist Henry Inman leads the strategic removal effort. Inman and volunteers pull out the Cape-ivy by the roots, come back in four to five months to see what's grown back, pull those plants, and repeat this process for a year or two. They've worked their way through one-third of the creek.

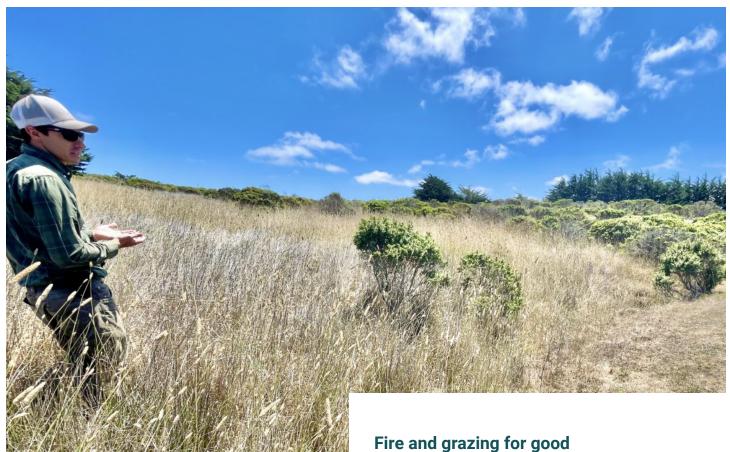
Where the Cape-ivy has been removed, a diversity of plants now grow, yet other invasive species have also appeared, a phenomenon known as secondary invasion, "but at least it's more diverse," says Inman. And more diversity means a healthier landscape.

Inman hopes to have all the Cape-ivy removed from the preserve in five years. They plan to study reference sites in West Marin to see what could be possible for the preserve and are following studies being done on biological controls – a moth and a fly – that, if introduced, could help tame the plant.

Able to join us? Sign-up online at egret.org/volunteer  $\rightarrow$ 



Left: Goats were brought in to graze the Cape-ivy in 1999. This wasn't ultimately a great choice for managing this weed – goats do not eat the extensive root network, which will readily re-sprout. Center: An area of Martin Griffin Preserve overrun by Cape-ivy in 2002. Right: The same area today now hosts a mix of elk clovers, horsetails, native ferns, and blackberries. Photo credits: Henry Inman and Len Blumin





At Cypress Grove Research Center, Land Steward Jim Jensen, pictured at left, is thinking about the past, present, and future, and asking, "How do we best mimic the disturbances that would have happened here a long time ago?"

Historically, large herds of elk and deer were moving up and down the coast and Coast Miwok were likely using fire to maintain ecosystem health. Without these disturbances, the proliferation of coyote brush and non-native grasses has caused native grasslands to disappear.

"It's not the diverse site it would be if it was more open, and had some disturbance going through there from time to time that would allow other species to come up and flower for things like pollinators, birds...if it's just a monoculture, you're not going to see the diverse amount of species benefit from it," explains Jensen.

Plans are underway for both controlled burning and targeted grazing on the preserve, to compare disturbance events and help inform which management practices are realistic and effective. In addition to the goal of promoting more native species diversity, burning and grazing aid in the processes of nutrient cycling and reducing ladder fuels to help create defensible space.



#### Audubon Canyon Ranch

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#### M.F.K. Fisher's Last House

### "I discovered that day, that in finding nature, natures finds you."

More than 70 entries for the Third Annual Last House Writing Contest were received from writers around the globe. The winning essays focused on themes of renewal, reemergence, rebirth. The grand prize essay, "Heartfelt," was written by nine-year-old Boston resident Annika (Ani) Thakarar, pictured at left.

We host the contest each year in honor of iconic American writer M.F.K. Fisher and the inspiration she drew from nature during her 21 years at Last House on the Bouverie Preserve.

Read the winning essays online at egret.org/blog ightarrow

#### end note

### About our new look

As we near the end of our sixtieth year in conservation, we've refreshed our look, including our website (egret.org), and this publication, *Conservation in Action*, to focus on the conservation stories top-of-mind for you – our members, supporters, and volunteers – through captivating imagery, personal reflection, and the science that informs our mission.

The process was made all-the-better under the excellent guidance of web design firm Giant Rabbit and site builder Coconut Moon.

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 wendy.coy@egret.org. Conservation in Action is published twice yearly as a benefit to our members, supporters, and volunteers.

Managing Editor Wendy Coy Edited by Katie Rogers Printed by Almaden Printing

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