VOLUME 44, NUMBER 10 NOVEMBER 2026

PAW PRINTS

Newsletter of the Eaton Canyon Nature Center Associates

Docent /Member Calendar

BAG LUNCH MINI-INSERVICE:
Bag Lunch is on hiatus indefinitely.

ECNCA Board Meetings

ECNCA Board Meetings are held on the second Wednesday of the month at 7 pm via zoom. If you are interested in joining a meeting, please send an email to ecncamembership@gmail.com at least 2 days prior to the meeting.

Public Calendar

- **Pasadena Audubon Society**
For meeting info see their website:
www.pasadenaaudubon.org
- **California Native Plant Society**
For meeting info see their website:
www.cnps-sgm.org
- **Pasadena Group Sierra Club**
For meeting info see their website:
www.sierraclub.org/angeles/pasadena
- **We Explore Earth**
For meeting info see their website:
https://weexploreearth.com/

Paw Prints Production

Editor: Amanda Getty
Graphic Designer: Diana Gonzalez
Contributors: Elaine Brown, Lindsay Bremner

Paw Prints is a monthly publication of the ECNCA. The deadline for submissions to the December 2026 issue is November 20, 2026. Send submissions to ajgetty@gmail.com.

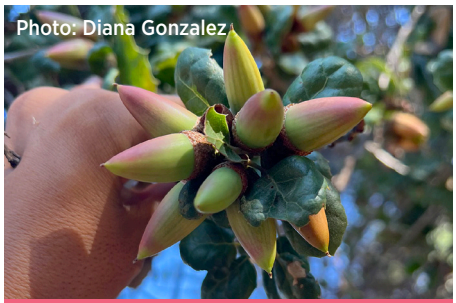


Photo: Diana Gonzalez

PARK IS CLOSED UNTIL FURTHER NOTICE

Photo: Cristhian Mace

Fire-loving fungi: Meet the pyrophilous fungi of the San Gabriel Mountains

by AARON TUPAC

After the recent rains, the season of our most mushroom abundance is here! The thrilling variety and mysteries of fungi never cease to amaze me. For instance, there are fungi that have evolved to thrive in post-fire environments and remediate the soil, and they even have a name—pyrophilous fungi.

My upcoming book, *Meeting the Mushrooms of Los Angeles: Curiosity, Queerness and How to Love a Fungus*, includes a section dedicated to these remarkable fungi. I feature *Pyronema* sp. (orange fire crust), reported to be one of the first signs of life immediately after the fires. They are the first responders during the early recovery phase after forest fires: They break down the initial layer of charcoal and dead organisms, making nutrients available for the next succession of life to move in.

Some fungi, like many species of *Morchella* (morels) or *Peziza* (cup fungi), wait for burns to mushroom and spread their spores. Other common species of pyrophilous fungi to keep an eye out for after the rains these next few years include *Myxomphalia maura* (ash cap), *Pholiota highlandensis* (bonfire scalycap), *Contumyces rosellus* (rosy navel), *Daleomyces phillipsii* (cabbage-

Continued on page 2

head fungus), *Geoscypha violacea* (violet fairy cup), and *Anthracobia melaloma* (charcoal eyelash).

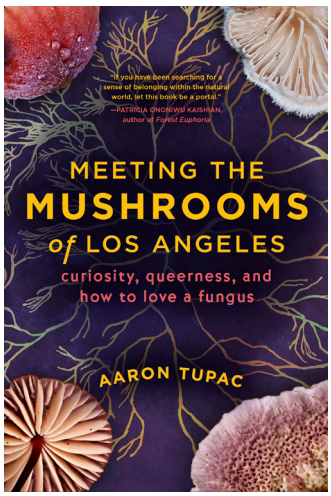
Although some fungi thrive in the wake of fire, most do not. The high-intensity fires that have become common in recent years—owing to over a hundred years of fire suppression, drought, and fuel build-up—kill upwards of 96% of fungal biomass in the soils.

Fungi are missing from our conservation frameworks, so there is minimal protection for their vital ways of living that support our ecosystems, especially our native plants. A single oak has upwards of 100 mycorrhizal partners (soil fungi) that are their vital life-support of nutrients, water, disease protection, drought protection, and so much more that science is making discoveries about monthly. Our native plants have the most fungally diverse soils. We're just learning that supporting healthy mycorrhizal relationships may play a crucial role in restoring and protecting endangered joshua tree (*Yucca brevifolia*) habitats.

Coordinated community-science efforts are playing a major role in kickstarting the fungal conservation movement. With a team of over a dozen community scientists, I had the honor of collecting and documenting hundreds of fungi in these foothills through the California Fungal Diversity Survey project funded by the California Biodiversity Institute—a first-of-its-kind, statewide, government-funded initiative to document the fungi that live in California. For the most part, we know the native plants and we know the native animals, but we don't know much about who from the fungal kingdom lives here. The collections we gathered will lay the foundation for years of future research.

A few months before the fires, I had the honor of visiting the Eaton Canyon Nature Center, teaching the docents about the ecology of fungi, and viewing the collections of fungi housed there (also known as a fungarium). These types of fungal collections are vital to help with restoration efforts. And community scientists can help by adding to these collections, making their own fungarium, or uploading mushroom observations to iNaturalist or Mushroom Observer. So many of our mushrooms here in SoCal are new to science and don't have names yet. Like the *Pyronema* sp., DNA sequencing has shown that there are most likely as-yet undescribed species that live locally. I've even collected undescribed species of mushrooms from an Eaton Canyon docent's backyard (graphic designer for *Paw Prints*, Diana Gonzalez!).

To learn more about the mushrooms and lichens that live here in Southern California, check out my book, which also contains educational material on what photos to take of mushrooms for identification, what information to collect, how to do fungal community science, and a whole lot more. You can pre-order *Meeting the Mushrooms of Los Angeles* wherever you buy books; it comes out in January 2027. Also, join me on a mushroom walk nearby—events are announced on my *Sporinator Newsletter* at aarontupac.substack.com—or check out my current fungal collections and photography exhibit, *The Mushrooms of the San Gabriel Mountains*, at the Monrovia Canyon Nature Center, on view through January.



Cover Art: illustration by Elissa Callen, photos by Aaron Tupac; Cover Design: original design by Rachel Celinese and Aaron Tupac, final design by Archie Ferguson

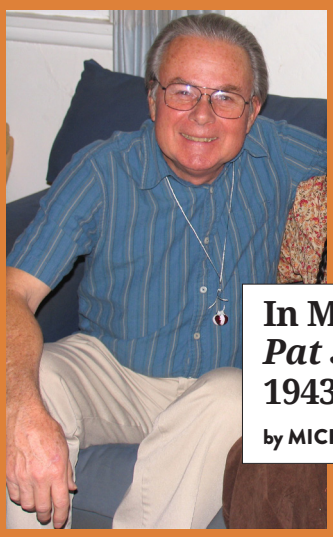


Photo: Courtesy Mickey Long

In Memoriam: *Pat Sullivan* 1943 - 2026

by MICKEY LONG

Patrick Sullivan, long-time employee of the County Natural Areas, passed away on October 1, 2026 in southeastern Arizona at the age of 83.

Pat worked as a naturalist at Eaton Canyon from the mid-1960s and as supervisor from 1978-1988. Pat oversaw the operation of the park and nature center, and taught early docent classes, designing the famous Docent Quiz practicum. Prior to his county time he was in the Army Medical Corp in Vietnam. He retired from the county in 1988 but continued working in the biology field in Central California, New Jersey and Florida.

An entomologist by training (a specialist in scarab and blister beetles) but with strong interests in reptiles and other living things, his lifelong dream was to live in the mountains of southeastern Arizona, where he'd made many collecting trips. His dream was realized when he located a house for sale high up in Ramsey Canyon in the Huachuca Mountains, next-door to the Nature Conservancy's preserve, where he and wife Lisa resided for many years.

A wooden sign over the gate to their home reads "Naturalist's Quest," after Ray Ditmars' book Thrills of a Naturalist's Quest. This site became a haven for large numbers of entomologists, especially when Pat and Lisa hosted the annual gathering called the "Infestation."

Pat will be missed by his many friends, including this author, who worked with and learned from him at Eaton Canyon for many years.

Landscape design at Eaton Canyon: Studio MLA update

by LINDSAY BREMNER

Just 10 minutes spent in nature each day can bestow significant benefits on our physical and mental well-being, and playing in nature can be a transformative experience for children. These points were highlighted at start of the latest "From Ashes to Action" event to illustrate why landscape design is important at Eaton Canyon, one of the most accessible places for Angelenos to spend time in nature.

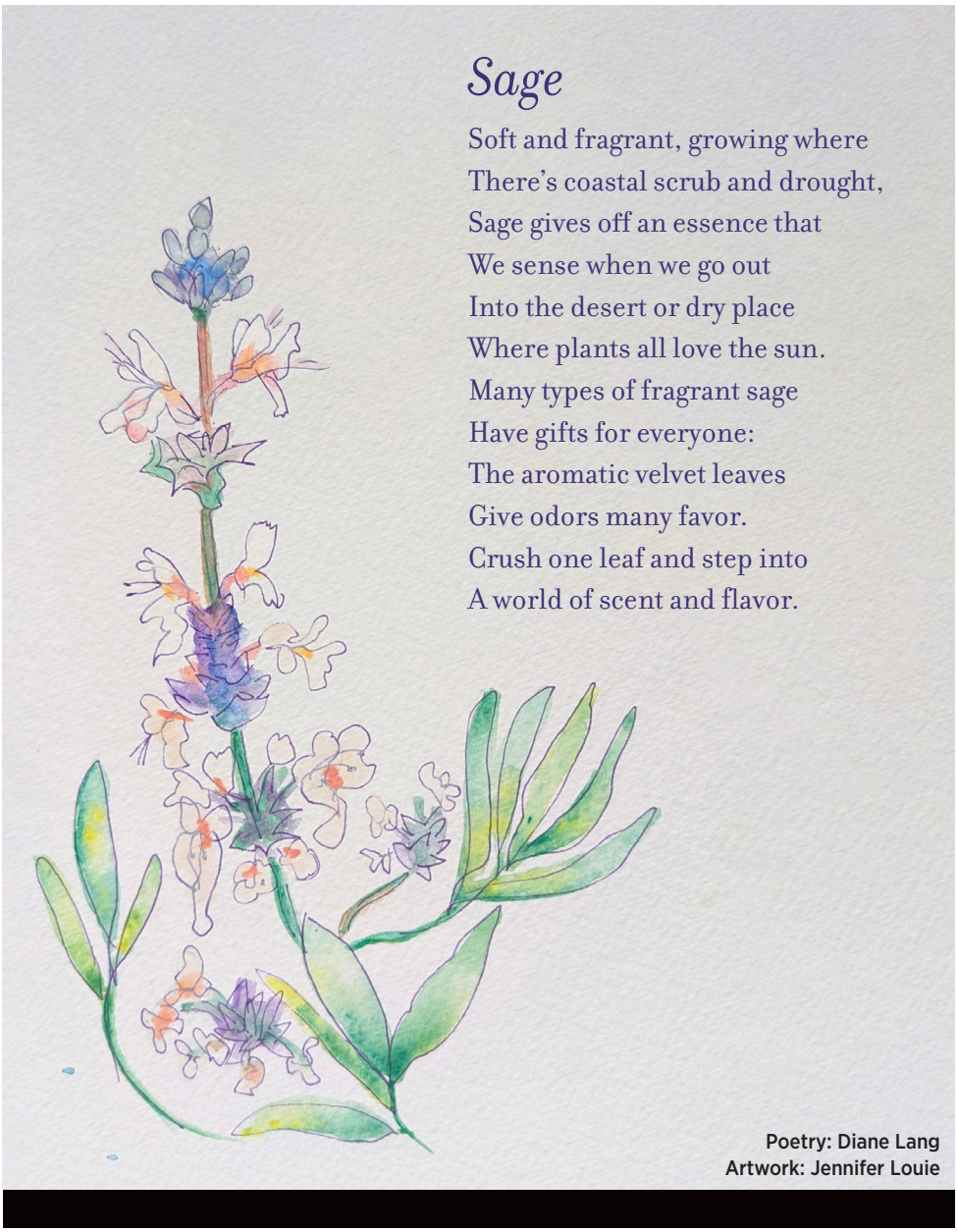
Megan Horn from Studio MLA—and recently minted California Naturalist—brought to life the current plans for outdoor areas and trails in the "gateway to the canyon" (the area before the first crossing), in front of an audience of around 150 people. In welcome news, around 80% of the oak canopy is coming back, and the new signage installed before the fire is in almost perfect condition. The pond, rock walls, and trail network, including the outer terrace trail, the fire ecology trail, the oak terrace trail, and the fox ridge loop, similarly survived and will be maintained in their pre-fire locations, as will the existing parking lot.

All the proposed changes are to areas that were already heavily affected by invasive species or compacted, such as the area leading north from the overflow parking lot. The Seed Pod, a 3D-printed building housing a seed bank, will be located here, as well as a new tribal demonstration garden developed in consultation with Samantha Morales-Johnson, biologist for the San Gabriel Band of Mission Indians. Known as the Keystone Garden, this area will honor Indigenous stewardship and cultural heritage and will be bordered by walking paths that lead toward the rest of the natural area.

At the southern end of the paved parking lot, a new Discovery Trailhead is planned for the location of the former outdoor classroom. This will be a place where children can engage in unstructured exploration—climbing and playing freely on logs, boulders, and wood steppers—with shaded seating, a hand-washing station, and a sensory trail nearby. The wooden benches of the outdoor classroom were damaged in the fire and will be removed, but the stage will remain.

Heading north to where the Nature Center was, a Nature Forum will serve as a flexible outdoor space. The area will be rewilded by adding additional canopy trees, water/dry streambed features, and potentially expanding the demonstration gardens that illustrate different plant communities; much of the hardscape will be removed but the former patio will remain as a place of memory. There will also be picnic tables and a restroom.

The space around the new Nature Center will be designed to reduce risk from fire and will include mineral beds, wind/ember breaks, water tanks, and a fire-wise garden. A new outdoor classroom will also be close to the Nature Center, and oak trees will be planted to the north. The County is also exploring the possibility of gating the trail here to enable staff to close access into the canyon when needed. Beyond the Nature Center and away from the main trail, remote areas will be monitored with minimal intervention, though all existing trails will be restored in time.



ECNCA Executive Board Members
President: Diane Marcussen
Vice-President: Karen Mateer
Recording Secretary: Sarah Richart
Corresponding Secretary: Mary Veselich
Treasurer: Terry Ginsberg

ECNCA Appointed Board Members
Ramie Case
Rose Haig
Susan Hopkins
Brenda Hurst
Judy Jenkins
David Kristoff
Diane Lang
Nature Center Director: Richard Smart
NCA President: Laura Nicholson

Eaton Canyon Nature Center Associates (ECNCA) is a chapter of the Nature Center Associates (NCA), a non-profit support group of the natural area park system of Los Angeles County. Founded for educational and scientific purposes, its primary mission is to develop in children and adults an appreciation of the natural world and to preserve Eaton Canyon as a natural area for future generations.

The Eaton Canyon Nature Center and Natural Area Park are located within the unincorporated area of Los Angeles County in the Supervisorial district of Kathryn Barger. The Natural Area and Nature Center are operated by the County of Los Angeles, Department of Parks and Recreation, in partnership with the Eaton Canyon Nature Center Associates.

Become A Member of the ECNCA (Eaton Canyon Nature Center Associates)

To join the Eaton Canyon Nature Center Associates, visit **www.ecnca.org/become-a-member**, or fill out the form below and mail with your check, **payable to the ECNCA, 1355 N. Mentor Avenue, Box 40167, Pasadena, CA 91104-9998.**

Name: _____ **Email:** _____

Address: _____

City: _____ **State:** _____ **Zip:** _____ **Phone:** _____

Please check appropriate box and mark return envelope "Membership"

☐ **Individual $30** ☐ **Family $45** ☐ **Senior $15** ☐ **Senior Family $30** ☐ **Student $15**
☐ **Friend of the Canyon $75** ☐ **Sage Saver $100** ☐ **Chaparral Contributor $250** ☐ **Riparian Guardian $500**
☐ **Oak Woodlands Protector $750** ☐ **Wildlands Angel $1000** ☐ **NEW** ☐ **RENEWAL**

Enclosed is my MEMBERSHIP in the amount of $_____ Enclosed is my additional DONATION of $_____
All contributions are tax deductible.