

FOUNTAINGROVE II

The OSMA Newsletter is published quarterly by the Fountaingrove II Open Space Maintenance Association.



BARN OWL

The sweet, subtle scent of oak in the summer woodland. Did you know we have Open Space trails? *More on page 2*



BARRED OWL



Can you spell Mycorrhizae?

You may have heard of trees communicating, sharing water, nutrients, even distress signals about disease and other vital interests via an underground network—the mycorrhizae fungi network. Root tips of trees and plants join microscopic fungal filaments that spread through the soil extending the roots and connecting entire plant communities. Pages 4-5.

Who is that out there?

It's dark, it's quiet, you're nearly asleep. But wait, what was that sound? Was it a hoot? Was it a shrill, high pitched call? Was it a long, hollow-sounding hoooo? Or maybe a rapid series of short hoots? Here in our area it could be any of these. Nights are ruled by our owls: the great horned owls, the barn owls, the barred owls, the western screech owls. See pages 6 and 7.

Good rap about poison oak.

If you can forget your past run-ins with poison oak and be open minded, you'll find it to be a highly valued member of our native plant and animal community. Birds feed on the berries, and spread seeds in their droppings. Insects feed on the leaves as do animals including deer. The plants provide cover and secure nesting sites. See more on page 8.

Nagasawa Park at Fountaingrove Lake.

Thirty-three acres of wildland park dedicated to Kanaye Nagasawa (1852-1934), master winemaker at historic Fountaingrove Winery. Hiking trails, fishing, quiet boating, picnic tables. Damaged by the 2017 fire, recovery is in the works but a worthwhile getaway now if you're looking for lakeside trails and quiet benches with scenic views. Gate is 1313 Fountaingrove Parkway (a new sign is coming).



To our Adventurers:

If you're among those who get out into our Open Space, why not share your exploits – and your discoveries – with us. Send copy and/or images to: leslie@focus-re.com.

Being a Fire Wise community involves every one of us.

The OSMA exists to assure that all necessary steps are taken to preserve the health and integrity of our Open Space as viable habitat *and* protect our community from the threat of uncontrollable wildfire. This involves all of us. More on page 3.





FIELD WORK

Board members checking monitoring wells and inclinometer tubes prior to scheduled stability study of a section of Open Space with a history of movement. Talked with Shirley Moore and John Allen, Fountaingrove II residents taking advantage of our scenic and convenient wildland trail system.

From the OSMA Board

This column is intended to display questions and comments from our members. We will provide as informative a response as we can. If the answers are beyond our expertise or responsibility, we will do our best to direct you appropriately.

Is there a map available of the Open Space hiking trails and approved access points?

We're now in the process of defining which of our trails are best suited for fitness walking – or more strenuous (but not too challenging) hiking. Our open space does have areas that could present danger to even experienced hikers and we advise all our members to avoid such risks. Once we have our map defined, we'll make it available, for OSMA member use only.

If you're experienced in wild or park lands and willing to volunteer as an Open Space Docent, please contact Leslie: leslie@focus-re.com. You could be a part of this from the start.

Is there much poison oak in the Open Space?

You'll find poison oak throughout the Open Space and most wooded areas in California. It's a native plant that has a vital role to play in our ecosystems, also one you'll want to avoid. Learn to recognize it and where you're likely to find it. Coincidentally, much of what you need to know, you'll find on page 8.

If you have a question, comment, photograph or a discovery made here in our Open Space, please share. Email: leslie@focus-re.com

The OSMA Newsletter is a quarterly publication of the Fountaingrove II Open Space Maintenance Association as a service to our members. Questions or suggestions are always welcome.

Email leslie@focus-re.com.

Be sure to visit Fountaingroveii.com

THE PRESIDENT'S CORNER

Being "FireSafe." It's everyone's responsibility.

Summer is here and your Association has been busy preparing for the Dog Days of Summer and beyond. The first pass of weed abatement is complete and now we will focus on spot weed abatement in areas of regrowth. There are two vendors involved in accomplishing the weed abatement of 220 acres of OSMA property and 13.5 acres of City Park Wildlands. The 202 acres of OSMA Wildland is weed abated by Redwood Empire Reforestation, Inc. These workers, during a heat spell, carried equipment uphill, downhill, over logs and rocks for



three weeks cutting weeds to reduce the fire fuel in the Wildland Area of Fountaingrove II. The second vendor is Valley Oak Landscaping, which weed abated the 18 acres of landscaped areas. Also, Valley Oak Landscaping is responsible for the annual maintenance of the OSMA landscaped areas.

Another activity approaching is the final phase of removing standing dead trees burned during the Tubbs Fire Disaster. This effort will begin after August 14th, end of 2022 nesting season, and continue for several weeks. It appears we will be able to clear all the remaining OSMA Wildland areas of standing or downed dead trees burned during the Tubbs Fire Disaster. The tree debris smaller than 14" diameter will be chipped and the larger logs will remain onsite.

The clearing of thousands of dead trees as a result of the Tubbs Fire and replanting approximately 700 trees and shrubs in the landscaped areas has taken place during the past four years. The rehabilitation of the OSMA Landscape and Wildland Areas during the past four years was made possible due to dedicated volunteers and the Special Assessment Funding provided by the OSMA members. Your Assessment Dues were used as promised, to expedite the recovery from the catastrophic destruction of the OSMA infrastructure, landscaped, and Wildland areas.

Achieving FireSafe – This is a balance of having some vegetation and appropriate number of trees, which is good for the environment, but at the same time implementing defensible space between homeowners' lots and OSMA properties and reducing the amount of chaparral in OSMA Wildland Areas. We have removed considerable amount of fuel load (brush and vegetation) in several areas surrounding the Fountaingrove II development. This is an effort to allow the Fire Department time to keep a small localized fire from becoming a large fire event.

While OSMA works diligently on maintaining a balance between fire safe, environmental considerations and beautification of its properties, so should all homeowners in the Fountaingrove Area. Do you have shrubs or bark against your house? Consider removing and placing hardscape landscape immediately adjacent to your home. Does your home have fire safe air vent screens? If not, consider having your vent screens replaced with improved fire safe screens. Do you have a tree canopy overhanging or close to your house? If so consider having it pruned back or removed. Do you have wood fencing connecting to your house? Consider replacing the portion connecting to the house with a nonflammable fence material. These are a few changes a homeowner can implement to improve the survivability of your home during a fire event.

Planting Trees - The Board has been busy campaigning for a Tree Planting Grant. Currently, OSMA is receiving final review of a \$25,000 grant to plant 185 oak trees in one of our burned Wildland Areas. This may turn into an opportunity for a volunteer tree planting event this fall. If you are interested in being contacted for participation in such an event in the future, contact Leslie Cohen at Focus Real Estate and Investments, Inc. at Leslie@focus-re.com or call 707-544-9443 x105.

*Bruce McConnell,
OSMA Board President*



Volunteers during our last tree planting. Be sure to contact Leslie if you'd be willing to help this fall.

The Underground Connection

Why do we have to water and fertilize our yard trees while trees in the Open Space do fine on their own?

The forest has a secret called, “Mycorrhizae,” a family of fungi literally at the root of tree and plant survival in the wild.

Some 460 million years ago, emerging plants and mycorrhizal fungi formed mutually beneficial (symbiotic) relationships below the surface of the soil. That symbiosis continues today benefitting over ninety percent of all plant species on earth, many of which could not survive otherwise.

Mycorrhizae, from the Greek meaning “fungus roots,” exist naturally in the soils of forests and woodlands. But where these soils have been disturbed, as in areas of urban or commercial development, the mycorrhizae has almost certainly been destroyed. Landscaping in these fungi-depleted soils would require constant fertilization and watering.

For these reasons, yards and other areas to be planted should be replenished with mycorrhizae fungi as plants are introduced. This is done by assuring the roots are in contact with the fungi in either dry form or in solution as you initially water your new plant. The mycorrhizae will form microscopic filaments that attach to the fibrous tips of the plant’s roots, then spread outward into the surrounding soil, extending the reach and the efficiency of the root system.

Once established, the mesh of fungi around the roots (the mycelium) will greatly increase your plant’s ability to absorb water and nutrients from the soil, reducing the need for watering and, with compost added to the soil, eliminating

the need for fertilizer. Additionally, the mycelium, will act as a reservoir for the tree or plant during dry spells or drought, holding water and minerals and feeding the plant as needed. Mature oaks can require a hundred gallons of water per day to survive our hot, dry Sonoma County summers. Clearly few would survive without this natural underground support. These same benefits are available to trees and plants in your yard if mycorrhizae fungi is made available to the roots.

A pine seedling with mycorrhizal fungi attached to and spreading outward from the roots allowing the plant to absorb water and nutrients from a larger volume of soil. This occurs naturally with 90% of all trees and plants in the wild, forming underground networks capable of sharing water and nutrients. Image from David Read: Mycorrhizal Symbiosis.



In this symbiotic relationship, the tree or plant is fed nutrients through the fungal network and conversely, the mycorrhizae extracts *from* the tree or plant, the nutrients *it* needs, produced above ground by the host plant via photosynthesis.

We will soon be doing more replanting in the Open Space as described in the President’s Corner this issue. Mycorrhizae will play a key role in helping to assure new plant survival.



Amazing Mycorrhizae

- From the Greek 'mukès' (fungus) and 'rhiza' (root), mycorrhiza is the symbiotic relationship between underground fungi and plant roots, benefiting over 90% of all plants on earth.
- Of the 240 or so identified fungi that form mycorrhizal relationships with plants, many are mushrooms and produce above ground fruit as well as contribute to the underground network.
- Several gourmet mushroom varieties are edible mycorrhizal fungi. Among them: truffles, morel, chanterelles, matsutake, and porcini.
- Learn more about Mycorrhizae and how your plants can benefit from this natural wonder.

The Underground Connection *Continued*

Four years ago, we (OSMA) replanted dozens of native trees using a waterbox “cocoon” device designed to help young trees get established in hot, dry summer climates. The biodegradable device is circular with a center area for the plant. Surrounding that is a reservoir for water fed to the roots slowly via osmosis through a fiber cord. But the secret ingredient is mycorrhizae fungi added to the soil. The fungi filaments join with the roots increasing their surface area and thus, the roots’ efficiency, helping the plant get established and prepared for life as a member of the surrounding mycorrhizae community.

After only 460 million years.

Today’s rapidly expanding commercial and residential use of this ancient miracle is a testament to its effectiveness. From planting trees and shrubs, gardens and lawns, even golf courses and sports fields, nothing builds stronger, more resilient and protective root systems. And mycorrhizae-enhanced plants and crops require less water and no chemical fertilizers. If you’ve not tried it, you’ve so many benefits to reap. *Please share with us when you do.*

Now that you know nature’s secret...

The benefits derived from mycorrhizae by trees and plants in their natural, wild setting can be duplicated in your own landscaping and gardening. Depending on where you live, the nutrient rich top soil may well have been removed or otherwise made untillable in a number of ways leaving no trace of mycorrhizae. Your plants may be relying on excessive watering and chemical fertilizers while nature stands by ready and eager to lend a hand.

Inoculating your plant’s roots or the soil around the roots with mycorrhizae should be considered. A little research will not only make you more aware of the world beneath you, it can make you the envy of all your friends and neighbors when they see the results in your landscaping, your garden output, even your lawn. Not to mention it will save you money on fertilizers—and *your water bill*. See the images below from a most informative website, **homesteadandchill.com**. Before you begin mycorrhizae use in your gardening and landscaping, visit this website. It will be well worth your time.



Applying Mycorrhizae

1. Mycorrhizae attached to young root tips extending their reach.
2. Applying dry mycorrhizae into a hole in the soil prepared for a new plant.
3. Mycorrhizae applied to the root ball of a new host plant prior to planting
4. Applying soluble mycorrhizae into the soil while watering after planting.
5. Two basil plants, the left planted with mycorrhizae, the right without.

Images from homesteadandchill.com.

The Night Shift

Among nocturnal predators, our local owl population ranks right up there with the who's hooo.

Owls are birds of prey of the biological order Strigiforme. In the world there are approximately 230 species. Around here, you're most likely to hear these four.

Everyone is familiar with owls. Throughout history they've been feared, revered, seen as mystical, mysterious, believed to be everything from protectors to harbingers of death. The phrase *a wise old owl* brings to mind the face of a Great Horned Owl as a symbol of wisdom and knowledge.

For the most part, owls all share the same characteristics and behaviors. They are preeminent predators with eyes and ears specifically designed for locating prey under even the most challenging of conditions.

Additionally, owl wings possess the ability to reduce, even eliminate, the audible air turbulence created by other birds in flight. This is due to a serrated effect on their leading edge and fringe on their trailing edge, features that break up the whooshing sound of air being sliced and then regrouping after passing over the wing. What little sound does remain is absorbed by the soft, downy feathers on the owl's wings and legs, rendering them sonically undetectable as they approach their prey. Advanced airfoil technology has benefitted greatly from the study of owls in flight, particularly the ultra silent, ultra deadly Barn Owl.



Mainly nocturnal, owls will hunt from dusk to dawn modifying their patterns to accommodate conditions and prey availability. Great Horned Owls may even strike during daylight if opportunity presents itself.

Where prey is abundant, Barn Owls have been observed hunting at dusk, again around midnight, and a third hunt near dawn. They also appear to have the ability to mentally map their hunting zones and patrol them methodically, especially areas where prey is often observed.

For most owls, the prey of preference is small mammals, rodents, mice, rats, squirrels, even birds. Since most hunting occurs at night, animals that are active during those dark hours are those most likely to become an owl's next meal.



General Owl Facts:

An owl's eyes are fixed facing forward but it can rotate its head 270°.

Owls are not nest builders, they take over the abandoned (or not) nests of other birds, hollow trees, even empty buildings.

The structure of owl wing feathers allows them to approach their prey silently.

Owls can hear the faintest of sounds with forward-facing ears set within a dish-like facial "sound collector".

Owls consume their prey whole or in large pieces, digesting what they can and expelling the rest (bones, fur, teeth) from their mouth as a compact pellet.

The Night Shift CONTINUED

Great Horned Owls are fierce predators unafraid to take on large mammals as well as other raptors: ospreys, peregrine falcons, even other owls. Domestic animals and pets are usually too heavy to carry away but may still be seen as prey when their normal food sources are scarce. But the Great



Horned Owl has no qualms with dining on even the humblest of fare such as field mice, frogs, or scorpions.

Efficient hunters in any terrain, their habitat of choice is the forest where their short wingspan allows them

maneuverability through branches and dense stands of trees. As with all owls their flight is relatively silent thanks to a thick layer of soft feathers that both insulates them from the cold and helps muffle the sound of flight.

Their appearance is most noticeably defined by their size (up to 24 inches), their prominent ear-like tufts (which are not really ears) and their large, intimidating, yellow eyes. Their call is a somewhat soft, *hoo, hoo-hoo-hooo hooo*.

Barn Owls, often referred to as *ghost owls*, appear eerily pale and mystical in addition to being the most silent fliers of the owl world. High-tech studies of the barn owl's silent flight have proven it to be virtually undetectable using even super sensitive microphones.

With superb night vision and perhaps the most sensitive hearing of all owls, the Barn Owl is able to locate and capture its prey in even total darkness. This with its stealthy silence makes for a deadly combination where prey is concerned. There is no warning and no time for evasive action. A Barn Owl's call, unlike the hoots of other owls, is a shrill, high pitched scream that will last one to two seconds.

While male Barn Owls measure up to 15 inches in length, the



BARN OWL

females can exceed 16 inches or more overall. Females are also more decorative with dark spots covering their bronze chest feathers. The larger and more pronounced the spots, the more interested the males seem to be, and more inclined to help with feeding their brood and other household duties.

Barred Owls, averaging 20 inches in length, are nearly the size of Great Horned Owls, but are preyed upon by the larger, more aggressive species. Great Horned Owls are in fact the primary predator of Barred Owls largely due to the fact they compete for territory – and Great Horned Owls are not known for their willingness to share.



BARRED OWL

The call of the Barred Owl is unique in tone and tempo.

You've likely heard it if you live near a wooded area. It's often mimicked as, "Who cooks for you?" More accurately the mellow-toned call goes: *hoo-hoot hoo-hoooo*.

Western Screech Owls are the smallest of our familiar locals with an average body length of 8 to 10 inches and weighing less than half a pound. But what they lack in presence, they make up for in pure gumption, often taking prey larger than their own size and weight, including rabbits, squirrels, rodents, small birds, bats, toads, lizards, large insects, frogs, fish. Literally anything they can catch.



Screech Owls are nocturnal. They nest in hollowed out trees and often spend their days perched at the opening of their roost-hole where they are nearly invisible due to their size and their muted gray coloration that blends with tree bark.

Unlike the Eastern Screech Owl which literally makes a harsh screeching sound, the Western Screech Owl's call is a series of a dozen or so high pitched chirps that begin slowly, becoming more rapid as the call progresses. No screeching, this one.

But wait, there's more: Hopefully you're now more aware of the owls in our Open Space – and in your own backyard. But there's so much more. Begin by researching recordings of these owl calls online. You'll be amazed at how many you'll begin to hear. **Get to know hooos out there.**

Itching for Some Recognition

Forever cast as villain, it's time Poison Oak got a positive review for the heroic parts it plays.

*While fans of *Oxicodendron diversilobum* may be scarce among us *Homo sapiens*, among the wild community, Poison Oak gets rave reviews for its supporting roles.*

OK, nobody is downplaying the misery you went through with your last, and hopefully final run-in with poison oak. It was pure anguish. But this native Californian—usually a shrub or a bush, or at times a vine capable of climbing to the treetops of oaks, even redwoods—is a valued member of our coastal ecosystems and would be sorely missed if we could wish it away.

Prevalent throughout California woodlands and forests, dense, leafy stands of poison oak afford protection from



predators for small animals as well as secure sites for ground-nesting birds. The California Towhee, a large brown sparrow, has a particular affinity for poison oak, nesting in it, dining on the berries and foraging for seeds and insects below it. It then returns the favors by spread-

ing the seeds from the berries in its excrement. Symbiosis in action between the plant and the Towhee.



Poison oak leaves, bright green in spring darkening in summer.

Poison Oak provides nourishment to other critters as well. A variety of insects including moths and butterflies feed on the leaves. Surprisingly, deer, fox, and squirrels also find the leaves tasty, all apparently immune to urushiol, the toxic (to us) oil that exists throughout the plant, on its bark, stems, leaves, internally and externally. The take-away here is don't touch any part of it -- that goes for its dormant, leafless winter period as well. *Beware of the bare branches.*



Be careful out there...

Poison oak can be mistaken for several varieties of wild shrubs. It also changes colors seasonally. The image above is its spring-summer dress, rich green with a shiny (urushiol) surface. Autumn leaves are more colorful, until they drop leaving the fully potent bare branches to fool the unwary.



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If you would like to sign up for email consent and receive this newsletter and other OSMA communications, contact Leslie Cohen at Focus Real Estate & Investments, Inc. 707-544-9443 x105 / leslie@focus-re.com



“The Wonder Seekers of Fountaingrove”

A reminder that Gaye LeBaron’s historical record of the mystical origins of our community is available for a \$15 donation to OSMA. Co-written with fellow historian Bart Casey, there is no more accurate accounting of our nineteenth-and early twentieth-century beginnings. Signed, hardcover copy, contact Leslie@focus-re.com.