How I Got Started Gardening With Native Plants

by Shonduel (Hayward gardener)

When I hit 40, I realized that I was not going to be able to have children. I connected my barrenness to living amidst the world's sixth Great Mass Extinction. After watching the wonderful and touching movie, "Winged Migration," where birds are filmed during migration flying over several continents for thousands of miles, I was sensitized to how dependent birds are on finding food and water along the way, and that my Bay Area yard was on the route of the Pacific Flyway. With time, I was able to redirect my generative energy into doing my small part to create and enrich the habitat around my home so that mothers of other species might have the joy of seeing their offspring succeed and carry on, and that the kids on my block might have the experience of sighting a slithery snake, a hoppy toad, or a lizard sunning itself, all rare sights today, but not when I was growing up.

When my husband and I purchased our home four years ago, the front yard was covered with crushed rocks, and the back yard had been covered with plastic Astroturf. There was an excess of concrete covering the precious ground. We promptly removed the rocks and much of the concrete. Our next step was to purchase 10 cubic yards of mulch from American Soil Products. The mulch was delivered to our home in a huge mound that we spread around on the surface to protect our soil and its microbiology from the sun.

I read several articles written by Jeffrey Caldwell, Bay Area biologist and California native plant expert, to learn about which plants attract and support the most wildlife and biodiversity. I also came across the following website which I found helpful — http://www.edgehill.net-species.htm/—after scrolling down a couple of pages to the native plant section. It is a compilation of many peoples' observations of nature interacting with native plants. From my previous studies, I had learned that islands and fragmented ecosystems are more resilient under stress, the more complex and

biodiverse the ecosystem. (I definitely see my yard as an island, and one of my sweet dreams is that my little postage stamp of a yard will someday be part of a beautiful patchwork of biodiverse micro-edens, including yours. That together, we can create life-sustaining habitat, wildlife corridors, and a caring community). I also wanted to see how much unexpected wonder I could create, which thus far has surpassed my expectations.

Briefly, we planted toyon, elderberry, coffeeberry, and pacific myrtle to provide berries for birds; penstemons, California fushcia, pink flowering currant, and monkey flower for the hummingbirds; and Indian pipe vine and showy milkweed to provide larval food for the butterflies in their caterpillar stage. I did not know it at the time, but pink flowering currant and Julia Phelps ceanothus starts blooming in late January and early February when not much else is blooming and attracts so many bumble bees that we wonder where they all come from and where they all go at the end of the day. Also of note, we purposely built our southern side fence of wire to allow the sun and small critters through and planted pacific myrtle because we then needed a tall and effective privacy screen. We planted elderberry and several species of buckwheat because buckwheat and elderberry are thought by some entomologists to attract the greatest diversity of native bees and insects, which help to support a more complex web of life and relationship.

Initially we purchased the majority of our plants from Yerba Buena Nursery at 19500 Skyline Blvd., near Woodside. It is one of my all-time favorite places. They have an absolutely gorgeous demonstration garden on acreage where you can see full-grown specimens, and if you time it right, they are in spectacular bloom. This gave me a sense of the form, size, coloring, and lighting and drainage needs of the various plants I was considering, which proved essential when deciding where to plant what in my yard. (I have since learned that a closer place to view a diversity of mature native plants is in the California Native Plant Section at the UC Berkeley Botanical Garden.)

In addition to the many plants we purchased, redwood, pink flowering currant, bay, wild grape, coast live oak, and coyote bush volunteered on their own or with a little assistance from the birds and the squirrels. Left on its own, our yard would be dominated by coast live oak and coyote bush, two keystone species. It is hard to believe, but I have read that California oaks are known to support 331 wildlife species, 5,000 different kinds of insects, and 7 types of butterflies. Coyote bush is documented to support up to 450 species. I took a gall from one of my coyote bushes to the free Sick Plant Clinic that meets once a month at the UC Botanical Garden. I was amazed to learn that the gall was filled with the larvae of a gall fly which helps to support 25 other types of insects that feed on the larvae, a true microcosm.

I buried a buckeye seed and valley oak acorns that I had collected and forgot about them until they revealed themselves as small trees. I learned how to grow plants from cuttings, which is so easy I regret not having learned how to do it much sooner. I have robust penstemon, monkey flower, California sage, California fuschia, pink flowering currant, and fig (oops, that is not native)—all grown from cuttings. I sprinkled seed from California poppy, *Clarkia elegans*, *Clarkia amoena*, sky lupine, and yellow evening primrose, (some of which I collected from the roadside) and love it when they reseed themselves the following year. Sky lupine, my all-time favorite flower, requires special protection from the slugs. After squashing more slugs than I care to admit, I learned that putting an 8-oz pineapple can (both ends opened) with a copper band around the top edge over the lupine is 99% effective. Copper banding is available at any plant nursery and most hardware stores in the garden section. It was explained to me that the electrical shock, which slugs and snails get when their slime touches the copper, acts to effectively detour them.

Deciding which plants to plant in the front yard vs. the back yard was easy because the front yard gets full sun in the summer and the back yard is partial shade. However, we were somewhat stymied as to "where to plant what plant where" in the front yard, that is, until I laid out what turned out to be a magical white rope to simulate where the sinuous

path would be. Life flourishes at Nature's edges, e.g.: a clearing next to a forest, a bank next to a creek. A windy path increases surface area; creates edge, mystery, and possibility; and stimulates the vestibular system, which helps to calm the nervous system. Yes. Having a path was also important to me because I wanted to minimize soil compaction, which fosters anaerobic bacteria and plant pathogens. Once the path was marked with the rope, the plants practically jumped out of their containers to tell us where they wanted to be.

What also helped was planting a cluster of plants whose foliage, growth pattern, and flowers complemented each other. For me it was Jerusalem sage (yellow), red hot poker (orange), firecracker penstemon (red), and lavender, which—while they are not native plants—gave me a starting point and a beautiful palette to work from. From there I became an artist, adding beautiful blue from ceanothus and California bluebells; orange from California poppy, California fuschia, and monkey flower; white from yarrow; pink from clarkia, snake lily, and redbud; yellow from Fremontia, Grindelia, sulphur buckwheat, yellow evening primrose, and golden lupine; lavender from the yellow bush lupine and silver leaf lupine; and purple from sky lupine and harvest brodiaea. My husband was clear that he did not want a yard that was marked by one of this and one of that, so we planted three manzanita with their striking red bark, two redbud (which have not grown much), and a number of bunch grasses to help tie the yard together. Yarrow also unifies the yard. Its roots move around underground and it shoots up here and there. (Of interest, we had a lot of ladybugs overwinter in the yarrow this past winter.)

One of our goals was not to have to water our yard. We did this a number of ways; by including plants that were well adapted to the Bay Area's Mediterranean climate, which is marked by a mild, rainy winter; a mild, dry summer; and a good five-to-six months without rain (no small detail). Over time, we developed a vast mycelium web from the layer of straw that we laid down before we spread the mound of mulch.(At one of the annual Fungus Fair at the Oakland Museum, I learned that 95% of all ground water that

is absorbed by plants is first taken up by mycorrhizal fungi, which are amazingly effective sponges.) Additionally, the path in the front yard also functions as a swale, which slows the rainwater down, keeps it from running off the land, and increases water infiltration. According to one of my permaculturist friends, swales can increase rainwater absorption rate from 1% to 88%. Once rainwater drops below three feet under the surface, it is protected from evaporation and serves as a reservoir for trees and shrubs during the dry season. Not surprisingly, we have not had any noticeable runoff, erosion, or pooling of rainwater on the surface these past couple of years which marks a big change from four years ago. Now after a hard rain, the soil is damp underneath the surface layer, in contrast to before when it did not penetrate the surface and instead sheeted off the land. I am pleased to report that last year we scarcely watered our sunny front yard during the dry season (which also helps to keep the weeds down) and took no casualties. (Please note: we hand-watered our newly planted plants during the summer for a good two years until they became established.)

Another trick we stumbled upon inadvertently while trying to protect our young yard from trick-or-treaters cutting across in the dark was to half-bury logs by several trees and shrubs. We left the logs after noticing that the nearby plants responded with noticeable increased vigor. I then half buried a couple of logs by the hazelnut, elderberry, and apple trees in the back yard because they had yellowish leaves and looked sickly. They too responded with increased vigor and vitality. In my mind, I was increasing the soil microbiology, the key to healthy plants. I later learned that logs are a rich storehouse of phosphorus, an essential, but scarce element that is necessary for good plant growth. Interestingly, the log in the wettest corner of the yard, which was also the most prone to erosion, decomposed into water-absorbing sponge that gave rise to a clump of turkeytail mushrooms, the most studied of the medicinal mushrooms. Functioning as sponges, logs help to hold water in an area and support life. Insect-eating alligator lizards, which love decomposing vegetation, have given their vote of confidence by taking up residence in our garden.

Lastly, the following is an account of a few unexpected surprises that we have observed. I cannot over-emphasize the importance of observation. Who would have guessed that we would come to welcome the aphids that cover the branch tips of the kale in the spring to our self-seeding vegetable garden? It turns out that our aphid-infested kale is a fabulous bird feeder and the site of much kitchen window entertainment. By the end of April, the plants will have been picked clean of aphids by bushtits, chickadees, house finches, and hummingbirds, who all need protein in the spring during the nesting season to successfully raise their young. Likewise, aphids attract several different types of beneficial insects, including ladybugs and syrphid flies (also called hoverflies), whose larvae feed on aphids. (It is worth noting that aphids are plant-species specific, meaning that the aphids on one species of plant will not infest a different kind of plant.) In the summer, house finches will land on the branches of this very same kale to relish its seeds. Likewise, the carrots and onions attract a whirlwind of flying insects and native bees when they bloom, which then attract black phoebes which feed on the multitudinous insects whizzing by. Life attracting life.