

RUNNING A NURSERY

By Phil Van Soelen

In Sonoma County in the mid 1970s when I was in my twenties and I first joined the Milo Baker Chapter of the California Native Plant Society, our annual plant sales generally consisted of plants “salvaged” from wild populations in areas being developed. Bulbs came from developments going in on the hillside fringes of Annadel Park; wood ferns from the Dry Creek drainage as the dam for Lake Sonoma was constructed. Native gems could be found stuffed with their native soil into recycled coffee cans. Now the Milo Baker plant sale consists primarily of plants propagated and donated by the small north Marin and Sonoma county nurseries that have a personal connection to California native plants.

As co-owner of a nursery specializing in California native plants, I am part of a loose network of botanical enthusiasts who seek out and propagate native plants and make them available to gardeners. Often the juiciest part of the business for me is the collecting of seeds or cuttings in the wild and the wonderful anticipation that comes with germinating seedlings or rooting cuttings. I feel honored to be able to handle so many different types of native plants at various stages in their lives. There is an intimate familiarity that comes with the full cycle of propagating plants from the wild and growing them in my own garden. Passing those plants on to my peers in other nurseries and at botanic

gardens also brings its own intrinsic rewards, as does making local genetic material available to our many customers who are discerning native plant gardeners. Don Mahoney of San Francisco Botanical Garden once said something to the effect that we were very lucky to have so many remnants of native habitat in Sonoma County. His perspective was no doubt shaped by the vast destruction that has been wreaked upon the truly unique flora of the San Francisco peninsula. By way of example, of the two species of manzanita native to San Francisco proper, one is extinct in the wild, and only one individual remains of the other. Although Sonoma County's flora is slightly less ravaged, it is far from unscathed. The vast flower fields that covered the Santa Rosa plain and Petaluma Valley are gone, and vineyards march into the hills, obliterating the rich chaparral. Nevertheless, Don's comment helped bring a shift in the way I viewed things. Instead of always focusing on the glass half empty, I now *try* to view these roadside fragments as opportunities. They are repositories of localized genetic material and clues to the composition of former plant communities. I am acutely aware that such roadside remnants are very vulnerable, being constantly degraded and whittled away, and that the common native plant of today is likely to become uncommon and more restricted with time. I have learned to jump on the opportunity to propagate something new to me or slightly unusual because the plants are all too frequently gone by the time I return.

About us

My business partner Sherrie Althouse and I opened California Flora Nursery for business in 1981 as a native plants nursery. We had previously worked together running Circuit Riders' revegetation nursery. California Flora Nursery, while not a revegetation nursery, retained an emphasis on natives, relatively small container size, in-house propagation, species diversity, and genetic diversity. Most of the nonnatives we grow are well adapted to our mediterranean climate.

Native here versus California Native

I find that with growing native plants there is often a tension between growing the greatest genetic diversity, propagating by seed or cuttings from a wide array of plants, and propagating named clones (cultivars) that have known desirable qualities, are featured in gardening reference books, and are therefore frequently requested.

The same sort of tension, or balancing, is required with regard to site specificity. There is a growing demand for plant material from specific watersheds at the same time that there is growing interest in "classic" California natives from other regions, plants such as *Eriogonum giganteum*, Saint Catherine's lace or *Trichostema lanatum*, Woolly blue curls. A small nursery is not a particularly lucrative endeavor to start with, but limiting its scope to local natives pretty much assures a dependence on public institutions and volunteer labor.

I think there is some confusion regarding cultivar names. People frequently say they want "the straight native form"

of a native species and in the process avoid named cultivars. But *Garrya elliptica* 'Evie', say, or *Rhamnus californica* 'Mound San Bruno' is just as much "straight native" as any unnamed cutting-grown or seed-grown individual. They were both selected from the wild and are neither natural hybrids crossed in the wild nor human-created hybrids bred in the garden. Perhaps it would more meaningful if one asked for a plant grown from wild collected seed if genetic diversity is the issue, or a plant propagated from a certain watershed, if regional specificity is the issue. Of course finding and purchasing a containerized native plant with those qualifications might prove to be impossible.

Seasonality

Late in fall the low inventory of many types of plants at California Flora often elicits the question from our customers, "Isn't it a good time to plant?" My reply, "Yes, that is exactly why we are out of so many things" is confusing in the context of our force-fed consumer culture. Customers seem to assume that they *should* be able to purchase natives when they want to plant them, in a world where out-of-season produce can be flown in from Chile, and Southern California nurseries can deliver trucks full of plants any time of year.

Rather than just buying in what is available from the big wholesalers down south, our offerings, especially the regional California native plants, are generally both unavailable from the big guys and seasonal in their availability from us.

In many ways we are analogous to the small specialty farms creating handcrafted produce that is available only in season. When we sell what we have grown, we are out until the next year. I often recommend that customers make their purchases from the small regional native plant nurseries in late summer or very early fall, so that at prime planting time, when the weather cools down, days shorten, and the fall rains begin, they will have on hand the plants they want.

What to grow

“Build it, and they will come,” has a nursery corollary: “Grow it, and they will buy.” As with the former saying, the latter is a half-truth. If we are personally excited about a plant we can usually sell a crop in the course of a growing season. Occasionally, a plant we like is so subtle or looks so bad in a can that the rule does not hold.

One of the joys of the business is seed collecting and taking small numbers of cuttings in the wild for the purpose of propagation. Often what we grow is largely a reflection of what is available to us in terms of wild- collected seed or healthy cutting material.

Sometimes plants in the wild are stressed, and it is only under more watered and fertile garden situations that they reveal themselves positively and provide better propagules in the form of seeds or cuttings.

Ideally we would have a large, well-maintained growing groundlandscape, similar to a native plant botanic garden, for the purpose of display and for generating seed and cuttings. Many native plants are longer-lived and produce better cuttings from plants growing in the ground rather than in containers. Also, because many people have a hard time

visualizing what a plant is going to grow into when looking at it in a gallon-size plant, we sell way more of a plant when we have one in the landscape. In reality the landscape at the nursery is the neglected stepchild, relegated to the margins and receiving minimal care given the other demands of running a nursery.

Growing native plants at the nursery.

At California Flora we grow plants in a "U.C. Mix"-- a "soil-less medium" made of such raw materials as bark, sand, red-rock that has a minimum of pathogens. I find growing young, temperamental natives (a subset of native plants) is often a race between rooting and growing or rotting and declining. A pot is a very artificial environment, and a clean, noncompost medium with fertilizers that do not contribute to rot is helpful. We use two fertilizers from Scotts, a big company but not quite evil incarnate like Monsanto. We use Osmocote, both a slow release form and a "top-dress special" that releases in cooler weather. Both are "chemical fertilizers." Mining rock and guano to produce organic fertilizers and then transporting them by petroleum-driven vehicles makes words like "natural" somewhat ambiguous. We also use plastic cans, often reused, and drive cars, by far our worst offense.

In my personal garden I am almost totally organic; I feed the soil, not the plant. My sandy Sebastopol loam is now, after 30 years of leaf mulches, plenty rich for most plants, and I focus minimal fertilizing primarily with rock dusts such as Greensand, a "natural" source of potassium or Soft Rock Phosphate, a "natural" source of potassium with other low or

no-nitrogen amendments. I find the biggest maintenance obstacle in a garden tends to be the suppression of weedy nonnative grasses and that added nitrogen tends to stimulate the growth of these aggressive exotic annuals.

Only very occasionally, with something like a young *Eriogonum* or *Arctostaphylos* that cannot quite decide if it wants to live and is prone to rot, will I "feed the plant" with a little Osmocote.

If I were just starting out in a tract home with a scraped soil, I would still probably feed the soil with rock dusts, but I would also add compost and try to get it living. At first I might use a slightly higher nitrogen source to goose things up a bit. Any advice regarding fertilizing is contingent on what plant one is trying to grow where and in what soil.

Our cuttings are done in a 2:3 perlite /vermiculite mix. These are heat expanded rock products and are very sterile. We do semihard cuttings of perennials almost throughout the year. There is a flurry of activity with shrubby cuttings in October and November of *Rhamnus*, *Arctostaphylos*, *Garrya*. We do *Ribes* in late spring after they flower and the new growth has hardened a bit. We use the powder Hormex and the liquid Woods rooting hormones. We have a hot-water bottom-heat system that keeps the root zone at approximately 70 degrees F. This is all essentially state of the art for about 1950, but it is amazing how many plants respond and can be produced using this method.

We soak seed for 24 hours in warm to hot water. We then stratify (artificial moist winter chill) in the refrigerator in moist perlite/vermiculite in a jar with a few air holes punched in the top. Stratification time can range from one to

three or more months and often ends as we notice the seeds germinating in the jar.

We then sow the seed into our basic U.C.Mix with a bit of perlite and slow release fertilizer mixed in. We sometimes screen the soil to provide an even surface for small seed.

As seedlings develop they are usually transplanted into 2-inch rose pots and grown on in the greenhouse until ready for larger containers.

When I started down this road years ago, I remember thinking that it would be great if every floristic region in California had its own native plant nursery specializing, at least in part, in the plants of that region. That is close to a reality these days, but the young nursery people of then are now generally middle aged, and land has become almost too expensive for little nurseries. The pockets of remnant native vegetation, which are freely accessible, become ever smaller and more impoverished. Global warming looms as an even greater threat to the entire ecosystem. I think the world will need little native plant nurseries more and more in times to come, and I hope that they will be able to find fertile ground to grow and prosper.

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