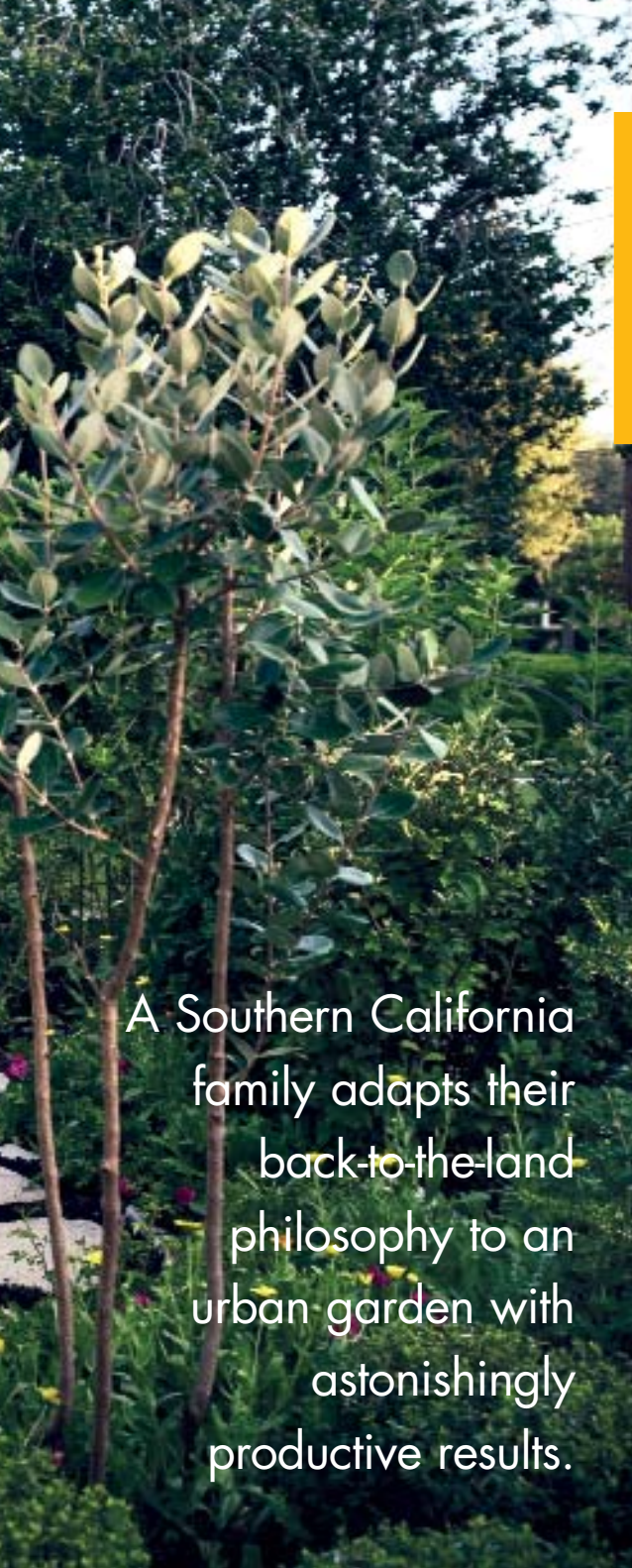




Pasadena *paradise*

J U S T I N C L A R K P H O T O G R A P H Y B Y S T E P H E N D A B R O W S K I



A Southern California family adapts their back-to-the-land philosophy to an urban garden with astonishingly productive results.

RIGHT: The family grows more than 300 plant species, including several varieties of peppers, heirloom tomatoes, salad mixes, eggplant, pumpkins, kale, squash, lima beans, herbs and edible flowers.

For most people, eating organic means a trip to the local whole-foods store—and, often, a hit to their wallets. For the Dervaes family, eating organic only requires a trip behind the house. The family of four raises three tons of food each year—enough to supply three-quarters of their diet and maintain a thriving organic produce business to boot.

Jules, along with his son Justin and daughters Anaïs and Jordanne, lives on one-fifth of an acre in suburban Pasadena, California, and cultivates about half the property, or one-tenth of an acre. Given that the average American's diet requires 1.2 acres of farmland per person, the Dervaeses are eating quite well off one-fiftieth of the land the rest of us require.

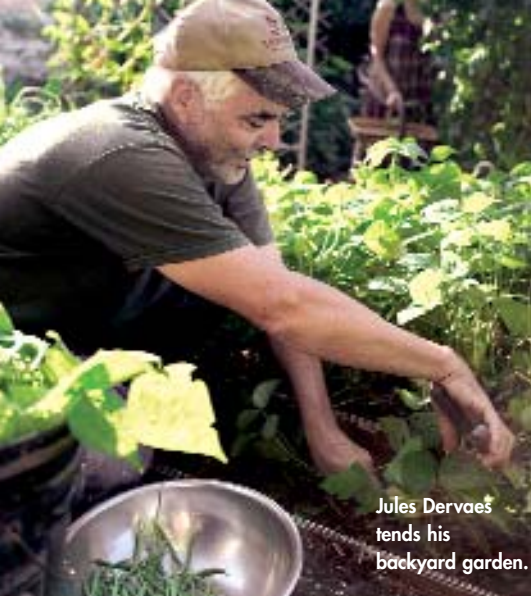
Let's put those numbers—one-tenth of an acre, three tons of food—in perspective. Granted, comparing monoculture (single-crop) farms with the Dervaeses' (300 varieties of flora and counting) is literally like comparing apples and oranges. As a means of comparison, the California Department of Food and Agriculture reports that most California corn or rice farms produce an annual yield of less than a half-ton per acre and the average bean farm one-fifth of a ton per acre. The Dervaeses' operation is about 60 to 150 times as efficient as their industrial competitors, without relying on chemical fertilizers and pesticides.

"Everybody wants more land," Jules says. "We decided to find out how much we could accomplish on *this* piece of land."



Multi-story gardening allows the Dervaeses to grow at least four different crops in a one-square-foot area. Twining plants can grow on arbors, while lightweight plants grow in hanging baskets. On the ground, the family grows stronger, taller plants, such as broccoli, above smaller, lower-growing plants, such as endive.





Jules Dervaes tends his backyard garden.

Jules Dervaes: Why I Garden

Before I began my Path to Freedom self-sufficiency project, my beliefs had brought me in the direction of simple living and environmental awareness. When water conservation became so important in the 1990s as California was going through a severe drought, I did away with my moisture-challenged lawn, replacing it with wildflowers, drought-tolerant plants and edible landscaping.

In 2000, I got angry when I heard that U.S. biotech corporations were bent on introducing genetically modified organisms (GMOs) into the food supply. Not wanting to be GM'ed myself, I knew I had to protect my family from this mad experiment. I felt cornered because I had no other convenient (cheap) way of getting genuine food anymore. Even though I had been gardening for many years, I hardly relied on those plantings. My family was tied to the supermarket.

Because of this threat to the very seeds of life, I turned radical. I aimed to grow as much of the food for our dinner table as we possibly could ourselves. We decided to make a go of it on the one-fifth acre (8,700 square feet) we had, but there were nagging doubts at every turn: *There is not enough room here.*

With lines drawn in the dirt, we proceeded to plant fanatically, trying to use every available space in the four corners of our small world. After the first year of gardening for real, were we ever shocked when the final tally showed we harvested more than 2,300 pounds of food. I knew we could do more, for we had only scratched the surface of our anemic, worm-deficient soil. And, as I began to look around, I noticed that something incredible was happening. My small place was growing larger right before my eyes.

Excerpted with permission from "A Path to Freedom," by Jules Dervaes, in Ecology Action online newsletter. To read the full article, visit PathToFreedom.com/EcologyAction.

Path to freedom

Jules had been running a small lawn-maintenance business six years ago when, in response to his growing concerns about genetically modified organisms and other potentially harmful additives in mass-market produce, and with no formal horticultural training, he and his family started their self-sufficiency garden project, dubbed "Path to Freedom." The Dervaeses have raised everything from asparagus to jicama, kiwis to cotton—all of it organic—thanks to Pasadena's lengthy growing season and the family's dedication. They've been successful using space-maximizing gardening techniques, including raised earth beds and potted plants that hang between trellised plants.

Jules Dervaes's genius lies in his ability to adapt his back-to-the-land vision to an urban environment. Ultimately, he realized that in addition to providing food for his family, this garden also could help sustain them financially if he sold its bounty to area businesses. Rather than competing head-on with larger produce suppliers, who can provide out-of-season crops, the family raises niche products that only a city full of gourmet restaurants could support: nasturtiums and Khaki Campbell duck eggs, for example. If a local chef needs a special variety of tomato for a new menu item, Jules snaps up a few semi-mature plants from the local nursery and fills a bed with them.

It's not all about earning a living, though. Come dinnertime, the Dervaeses enjoy sitting around a couple of steaming veggie pizzas and delicious desserts baked in their cob oven—all made with the kind of just-picked produce you just can't buy, even from an organic grocer. 🍴

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Chickens provide fresh eggs, organic pest control and manure for compost. For more on keeping backyard birds, see "City Chicks," page 62.





Tangy, delicious elderberries from the garden

Planting Seeds Outside the Garden

The Dervaeses' garden exemplifies both sustainability and frugality—from the manure (sweepings from local stables) used as fertilizer to the trellises (old bicycle wheels), from planter dividers (recycled glass bottles) to homemade pots-within-pots that save water. And that vision extends beyond the garden.

The family drives one vehicle, a black Chevy Suburban that runs on biodiesel refined from discarded cooking oil provided by local restaurant clients. The Dervaeses reach out to their community by using their garage to screen films, such as *The Greening of Cuba*, and hold seminars on building cob ovens or going solar. The Dervaeses also took advantage of Pasadena's relatively generous home-greening rebates by installing a \$14,000, two-kilowatt solar-cell system for less than half the retail cost.

Currently, the family is installing a wastewater reclamation system, a dual-flush toilet and a composting toilet. Already, they rely on hand-crank appliances and a pedal-power grain mill. "You can't do this," Jules says, waving a hand at his backyard, "and then go into a house and flip on all these switches."

Jules Dervaes's Garden Wisdom "Anyone can do this, if they have dedication," says Jules Dervaes of his wildly productive garden. "Don't be afraid to start small with something like herbs that you know will survive." For aspiring urban gardeners, Jules has plenty of advice, which the family makes available during its many workshops. Here's a smattering.

Get to know your backyard. Though you've mowed your lawn for years, you may not know its ecology. As an example, Jules points out a patch near the rear of his yard that doesn't appear to be shaded, but which, strangely enough, feels drafty. Jules uses a canopy with a shade cloth (available at hardware stores) and the micro-zone's natural coolness to squeeze out one more round of lettuce in summer.

Let natural ecosystems develop. Jules recommends exercising patience when that first aphid infestation happens—the solution already may be in the local insect population. Recalling Path to Freedom's first infestation, Jules says: "I tried spraying soapy water everywhere, but what I actually needed to do was just let the aphids continue to spread. Their natural ladybug predators needed the aphids to max out before they got to work." Now, says Jules, an entrenched ladybug and praying mantis population takes care of most of his pests.

Keep a nursery. Beside his house, Jules keeps a large workbench with dozens of seedlings. He figures out when to plant by using "feeler crops," guinea pig seedlings that he puts in the ground before the rest. He rotates hot, dry plants (beans, cucumbers, corn and peppers) with cool crops (kale, mesclun, snow peas), following the lead of the local nursery. "They wouldn't be selling a plant if it weren't time to plant it," he says. Jules's own mini-nursery allows him to have a diversity of crops on hand; if one type fails, he'll simply pull it out and substitute another.

Start a skyscraper farm. Most of the Dervaeses' backyard was initially covered in concrete, so Jules started by experimenting with multi-story planting—broccoli (a tall, strong plant) with endive (a low-growing salad green) in containers, with each plant occupying its own "story" in the skyscraper. Using that same principle, Jules plants three or sometimes four crops vertically, using trellises to grow vine plants (trombocino squash, for example) that grow above their downstairs neighbors, such as strawberries hanging in baskets.

Take a holistic approach. "It's so important to feed the soil," Jules says. He fertilizes between plantings using a mixture of kitchen compost, bat guano pellets and droppings from his rabbits, ducks and chickens. He prefers to let some varieties of vegetables go to seed at the end of the season in order to establish a seed bank. Every week during growing season, he dilutes one-quarter to one-half teaspoon of a commonly available kelp fertilizer in a gallon of water and sprays it directly on the plants. (Salad greens, such as lettuce, should not be eaten right after contact with kelp fertilizer, especially without washing, because it can leave a fishy taste.)

LEARN MORE: To tour the Path to Freedom garden, call (626) 795-8400 or email dervaes@pathtofreedom.com. Visit PathToFreedom.com.



ABOVE: Not just for show, the Devaeses' front yard contains nearly 95 percent edible, useful or medicinal plants.
BELOW: The garden makes money through sales of some of its organic produce—edible flowers, mixed salad greens, eggs and unusual varieties of heirloom tomatoes—to local restaurants.

