Light-Touch Garden

MAKING SUSTAINABILITY a design priority produces better gardens, easier on the planet. But that's not the only benefit; the thinking that goes into them creates landscapes that look more at home with their natural surroundings. The Santa Barbara, California, home of architect Ken Radtkey and landscape architect Susan Van Atta is a good example.

The planted roofs over the main structure and garage insulate the house, harvest precious rainfall, and provide a fire-resistant surface that's especially important in Santa Barbara's fire-prone hills. But their planted surfaces also help the house blend seamlessly into the foothills behind it.

The tiers of plantings in front of the house aren't just pretty; they're hardworking. Most provide food—both for the family and for birds, butterflies, and bees. Harvested rainfall and gray water fill all the irrigation requirements. The neat rows also lend an agricultural flavor, emphasizing its rural location. Even the compost piles are well thought out. For convenience, Van Atta wanted to set them up close to the kitchen. But in such a visible spot, they needed to be attractive. From the outside, her solution looks like a handsome fence; within, it's producing compost quickly. The design is as efficient as it is elegant.

DESIGN: Susan Van Atta, Van Atta Associates.

"Guilt-free abundance is what our home is all about. Because everything was planned to be regenerative, we live well at no great expense to ourselves or the environment."

—SUSAN VAN ATTA

Ordered planting *(left)* Each tier of the front landscape has its function. Nearest the house are ornamental edibles. Next is a nonthirsty lawn of native buffalo grass *(Buchloe dactyloides)* for family games, then a band of natives, followed by a row of raised vegetable beds, a water-catchment basin covered by *Dymondia,* a bocce ball court, and, finally, a citrus orchard. Stone-fruit trees and natives grow along the driveway.

Roof meadow *(below)* The *Carex praegracilis* lawn that covers the garage roof (visible at right in large photo) absorbs rain as well as provides living space. Small succulents dot the foreground.

THE DETAILS

This Santa Barbara, California, house and garden make thoughtful use of materials, both inside and out. They're designed to save energy, water, and other resources, to respect the surrounding natural landscape, invite pollinators, and provide food for the owners. Here's an at-a-glance summary of their many Earth-friendly features.

PLAY LAWN. The native grass lawn is just large enough to use as a play surface. It's watered by a subsurface distributed cistern. Broken concrete slabs from a previous demolition support the edge.

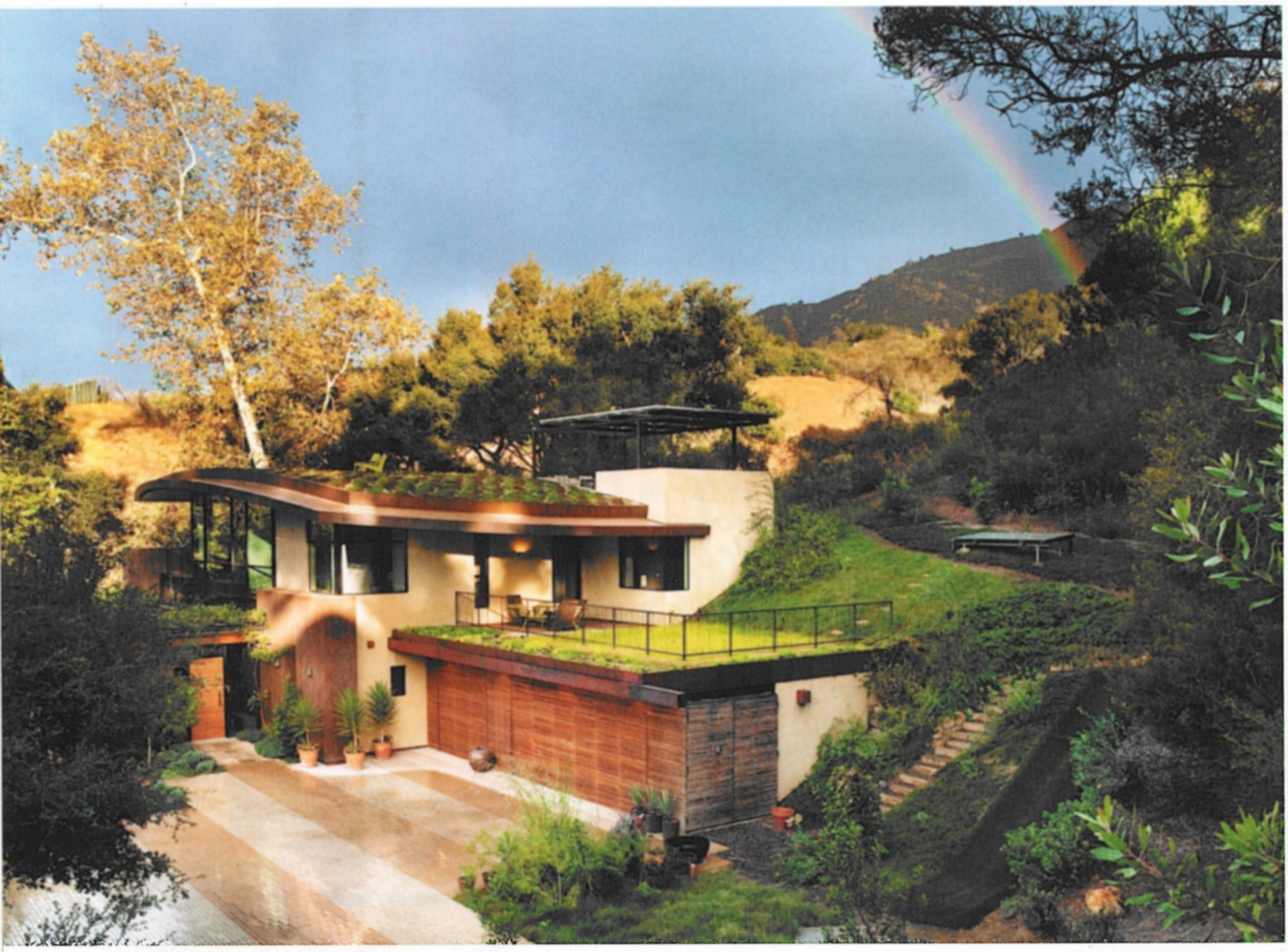
EDIBLE GARDENS. The orchard, along with terraced vegetable and herb gardens, are irrigated with filtered gray water and harvested rainwater.

NATIVE PLANTS. Throughout the property, plants native to Southern California echo the surrounding habitats and help restore woodlands, grasslands, and chaparral.

LIVING ROOF. Succulents hold water in their leaves, which helps to cool the home in summer and warm it in winter, and they provide a fire-resistant surface.

PERMEABLE PAVING. It reduces runoff in the driveway and covers the bocce court.

WATER-SAVERS. A detention basin collects and filters rainwater runoff from the roof and other sources, while low precipitation-rate sprayers provide any needed irrigation.



Green ideas *(above)* A solar panel shades the roof viewing area; the structure at the top of the meadow is also a solar panel. The steps alongside the garage are recycled stone; the nearby green area is an artificial-grass slide. Eucalyptus that was harvested from the site makes a handsome covering for the garage.

View roof *(left)* Sedums in two colors (*S. album* and *S. spurium* 'Dragon's Blood') connect the roof to the surrounding trees, making the space seem more like a park than a roof. The plants act as insulation, cooling the house in summer, warming it in winter. And much like sponges, they soak up rainfall and moisture in the air.

"When we shower, our water is heated by the sun, and gets reused to irrigate our fruit trees. Nothing is wasted."
—SUSAN VAN ATTA

Classy composting *(right)* The three-bin composting system, based on a design by legendary landscape architect Thomas Church, is as handsome as it is effective. A beehive is nearby.

Safe hens *(below)* A wire enclosure and a border of spiky agaves protect Buff Orpington and Golden Laced Wyandotte hens from coyotes, bobcats, and hawks. The flock provides eggs for the table and manure for the compost.