

THE APPLE GROWER

Michael Phillips in *The Apple Grower: a Guide for the Organic Orchardist* (344pp, Chelsea Green, 2005) notes that for centuries, until the last 100 years, we grew apples without petrochemicals. Now experts say you can't make a living growing organically. But the serpent in this paradise, consumers' demand for perfect, unblemished fruit, lurks in the market, not the orchard.

Across the U.S. a few thousand organic growers are succeeding, combining age-old practices and modern horticultural science – but only on small farms where they can know their trees intimately.

This book is primarily for them, but there's plenty here for backyard orchardists as well.

Phillips talks about orchard and tree care, dealing with insects and diseases, the nutritional value of sustainably grown fruit, and marketing, including educating consumers. He describes himself as a guy who grows apples with integrity. His goal: to grow wonderfully tasty, healthful apples while improving the long term health of his orchard – and make a living at it.

He starts from the ground up. “Natural soil fertility begets everything good that happens above.” And since healthy soils grow healthy apples and infertile soils pass on deficiencies, Phillips urges the orchardist to do everything possible to promote living soils. Microbes, he says, feed the soil which feeds the trees which feed us. The nutrient density of the fruit correlates directly to the life density of the soil.

The ideal for apples is a forest-edge soil, dominated by fungi. To achieve this, chip and spread trimmings every year, especially under the dripline where most feeder roots grow. Use a cover crop such as red clover, keep a cow if you can, for manure to make compost, and encourage broad leaved plants instead of turf in the understory, easier for apple roots to penetrate.

Such a regimen can also save money – a living soil supplemented with compost usually provides sufficient nitrogen. And compost/seaweed leaf sprays will take care of most disease problems for the home orchardist.

Here in Redding, raising organic content and maintaining it is harder because in hot weather soil decomposes faster. So we need to add wood chips, compost and cover crops every year, to replace what's lost to the sun.

Fortunately we don't have to deal with as many diseases and pests as Phillips does in New Hampshire. But doing it sustainably, so as not to pass on to future generations orchards that are "hazardous to our health," requires careful observation, study, experimentation and patience. We need to learn pest and disease life cycles, so we can intervene at crucial moments. Spraying there must be, but Phillips is careful to use those which confuse, deter or kill only the target species. Even broad spectrum organic sprays can trigger pest outbreaks, by killing off beneficials.

"An apple a day keeps the doctor away." But only if it's organically grown: if plants can't participate in resisting diseases, they won't accumulate health-promoting nutrients.

For successful marketing, the small organic orchardist must sell locally, looking to CSA's, farmers' markets,

natural food stores, co-ops – wherever grower and consumer can deal most directly. The small grower's greatest advantage is variety – heirloom apples, regional and modern favorites, green, red and striped, sweet and tart, early and late, dessert and cider – along with jam, cider, vinegar, etc.

And, Phillips insists, charge what holistically grown fruit is worth. “Cultivating an appreciative customer base goes along with nurturing of the trees.”

Phillips calls trees “good friends,” and suggests we lie down under them to see how much sunlight's getting to the lower branches. “A glad heart is as important in the orchard as a shovelful of compost.”

And finally, a definition: sustainable agriculture means a sustainable living for farmers growing life-sustaining food.