

## CHAPTER I

# Agrarian Dreams

Care about social justice issues? Labor and employment practices by agribusiness, health problems related to pesticides [applied] by farm labor, and the security of the small family farmer are related issues. If corporate farms continue their takeover of our food supply, then these businesses and their giant trading corporate partners can set the price of basic food commodities, dictate the wages and working conditions of farmworkers, and put family farms out of business through the consolidation of landholdings and economies of scale. Polluting farming practices and poor labor conditions are cheaper and are more likely to occur if corporations are allowed to continue taking over our food production. Preserving the family and small-scale farm that can employ alternative methods and that can produce food for local consumption ensures food safety and is more environmentally sound than industrialized farming methods, and the organic industry is made up of primarily small-sized producers. We have not fully addressed the issues of sustainability within the growing organic industry, but that question may become moot if these laws [the first set of organic rules proposed by the USDA in 1997] are passed. Lower standards will allow for a greater takeover of organic farming by agribusiness and put the small producer out of work and off the land.

Claire Cummings, commentator on food and farming on KPFA radio

I feel that the motivation of the people growing this way coincides with my concerns about the health of the planet. . . . [Organic farmers] are motivated by belief, not profit margin.

Patricia Unterman, food writer,  
*San Francisco Examiner*, 1998

The turn-of-the-millennium years have been nothing less than extraordinary in exposing the public health, environmental, and moral risks of industrialized agriculture. Each new round of news stories, whether about genetically engineered foods, mad cow disease, hoof-and-mouth disease, *E. coli* contamination, or pesticide poisoning, reinforces the idea that our system for growing and processing food has run amok. The surprising popularity of books such as Eric Schlosser's *Fast Food Nation*, Michael Pollan's *Botany of Desire*, and Marion Nestle's *Food Politics*, in addition to a wealth of titles focused on individual food commodities, speaks to heightened public interest in the production and consumption of food. It is becoming increasingly difficult not to think about what goes into our mouths.

In this era of escalating food politics, Claire Cummings has voiced what many believe: organic farming is the agrarian answer. Not only does it counter all of the objectionable by-products of industrial agriculture; it is also the clear antidote to corporate food provision, enabling the resuscitation of the small family farm. Echoing her sentiments, many writers such as Pollan, Schlosser, and others have concluded their books with accolades for organic farming, emphasizing its difference from industrial agriculture. Pollan suggests that organic farming “can’t be reconciled to the logic of a corporate food chain” (2001a, 224); Schlosser waxes rhapsodic about an organic-cattle rancher who claims “nature is smart as hell” (2001a, 255). Meanwhile, many practitioners and loyal consumers link organic farming to a new agrarianism that will save the family farm. Some even talk about a “rural renaissance” in reference to the current vigor of direct marketing that supports farms of relatively small size.<sup>1</sup>

This book casts doubt on the current wisdom about organic food and agriculture, at least as it has evolved in California. In an empirical sense, it refutes these popular portrayals. Many people presume that institutions within the organic sector operate according to a different logic than that of the agribusiness firms that drive the industrialization and globalization of food provision. This book shows that the organic sector itself is “industrializing” and “globalizing” at a rapid pace. It tells how organic farming rarely meets the ideal of “farming in nature’s image” (Soule and Piper 1992). And it argues that the organic movement has fallen woefully short of addressing the social justice issues that are often assumed to be part and parcel of organic farming. However, it is not good enough—indeed it could be construed as highly irresponsible—simply to recount the ways in which organic farming does not live up to the discourses that support it. The main purpose of this book is to ex-

plain *how* organic farming has replicated what it set out to oppose. First, however, it is important to take stock of what organic agriculture was intended to be.

#### THE ORGANIC CRITIQUE

Unfortunately, the only serious critics of industrial farming per se [are] those who comprise what can be loosely called “the organic-farming movement.”

Colin Duncan, *The Centrality of Agriculture*

At first glance, organic farming seems to represent a clear opposition to industrial agriculture, defined for the moment as that which is made more factorylike in order to be more productive and profitable.<sup>2</sup> Organic farming ostensibly incorporates and builds upon complicated natural systems, in sharp contrast to the simplification and standardization that often characterize industrial agriculture (Ikerd 2001). Organic producers putatively embrace farm self-sufficiency and whole foods to the certain detriment of agribusiness, which commodifies inputs and processes that were once produced or carried out on the farm or in household kitchens (Goodman, Sorj, and Wilkinson 1987). The organic movement supposedly puts rural livelihoods first, suggesting an attention to the social justice issues that have been shunted to the side in the interest of farm productivity and “feeding the world.”

In truth, it is impossible to divine a singular argument and meaning for organic agriculture. The unification of themes into an organic movement has not been without contradictions and exclusions, and many contemporary understandings of organic agriculture are not even complementary.<sup>3</sup> Moreover, there has always been a tension between those who see organic agriculture as simply a more ecologically benign approach to farming and those who seek a radical alternative to a hegemonic food system. These unresolved tensions continue to surface in ongoing battles over the regulation of “organically grown food,” and as this book will show, even the idea of regulation is contested. But even though the organic movement has never agreed on the extent to which its alternatives should be embedded in noncapitalist forms of production, it has gained coherence and momentum through the shared awareness that the undesirable aspects of mass food production are at least in part the result of profit-driven agricultural industrialization.

Most observers of the organic farming movement would also agree

that its ideological compass derives from four broadly defined social movements: the various campaigns centered on alternative production technologies, the health and pure food crusades, the 1960s counterculture, and modern environmentalism.<sup>4</sup> Also present in each of these movements—although not without controversy—were elements of a more radical interpretation of the industrialization critique. What follows is a brief sketch of how each of these movements has contributed to the industrialization critique.<sup>5</sup>

Clearly the most influential critique, as far as organic *farming* goes, turns on the consequences of intensive agricultural production.<sup>6</sup> Although interest in the relationship between agricultural practices and soil fertility goes at least as far back as the sixteenth century (Thirk 1997), strong concern about the effects of modern agricultural practices materialized in the late nineteenth century, when “mining the soil” was associated with a worldwide glut in wheat production. An Englishman, Sir Albert Howard, considered by many to be the father of organic agriculture, was one of the first to articulate an alternative to agriculture as usual, on the basis of his work in India in the early part of the twentieth century. Over the course of his lifetime, he published several books describing composting techniques, touting the importance of humus and the reuse of agricultural wastes on the farm, and urging the elimination of chemical inputs because of their effects on soil fertility (see, e.g., Howard 1940). It was this work that inspired Lady Eve Balfour to found, in 1946, the Soil Association, the United Kingdom’s first organic farming organization (Mergentime 1994). In some of Howard’s writings he also made an explicit connection between the quest for profit and the degenerative aspects of modern agriculture (Peters 1979).

In the United States, a critique of productivity-focused agriculture emerged in the 1930s, a confluence of depressed agricultural prices and the ecological disaster of the dust bowl (Worster 1979). A “permanent agriculture” movement arose, calling for soil conservation measures such as terracing and cover cropping. Occasionally those in the permanent agriculture movement made the claim that the problem with conventional agriculture was its dependence on technology and science, which stressed the domination of nature for production and profit (Beeman 1995). In 1940, J. I. Rodale purchased an experimental organic farm in Emmaus, Pennsylvania, to test Howard’s theories, as well as his own ideas about health and nutrition.<sup>7</sup> Although Rodale steered clear of left-wing critiques of agriculture, the *raison d’être* for his farm was to ex-

periment with techniques that were clearly being shunned by the agricultural research establishment (Peters 1979).

Earlier food movements made a second major contribution to the industrialization critique. The original movement for the U.S. Pure Food Act began in the late nineteenth century to address both intentional and unintentional contamination of food. Its initial concern was food adulteration, a widespread phenomenon when processed food was first marketed in impersonal, extraregional markets and bulk-producing additives were introduced as a cost-reduction measure. The Pure Food Act established a system of regulation, although that system primarily benefited the major food manufacturers, who could most easily comply with the new bureaucratic standards (Levenstein 1988). It also unleashed a still-to-be-quieted concern that food safety could easily be compromised in the pursuit of profit and productivity.<sup>8</sup> Moreover, the journalistic muckraking (such as Upton Sinclair's *The Jungle*) that produced the necessary political momentum for the Pure Food Act suggested an important connection between poor working conditions and compromised food. Recent exposés, such as Nicols Fox's *Spoiled* (1997), Schlosser's *Fast Food Nation* (2001), and Pollan's article "Power Steer" in the *New York Times Magazine* (2002), continue in that vein, driving home the point that intensified methods of livestock production and handling are largely to blame for recent problems with bacterial contamination in food.

The connections between the organic farming movement and the health food movement are even more explicit, as both Belasco (1989) and Peters (1979) show. The most direct connection was first made by Rodale Press, publisher of both *Prevention*, a popular health-focused magazine, and the magazine *Organic Gardening*. Each promoted the messages of the other. But there was an important idiomatic association, as well, for *organic* connoted both "natural" and "whole," the two words most often used to suggest foods that have been minimally transformed by human manipulation. Starting in the 1830s with the whole wheat crusade, led by Sylvester Graham of graham cracker fame, health food advocates saw a unique value in whole, or less-processed, foods, suspecting that they offer important synergies, undiscovered life-enhancing properties (e.g., antioxidants), and protection from dangerous additives. Adelle Davis, a popular health food writer of the 1960s, lambasted the food processing industry for promoting foods that were nutritionally debilitated, the sort of critique that was furthered in the 1970s by groups such as the Center for Science in the Public Interest, Ralph Nader's "Raiders," and a rash of book publications that denounced the

food system (Levenstein 1993). Since food processing is such an important source of profit in the American economy, this critique, too, had radical implications.

Utopian experiments and back-to-the-land movements provided a third major influence on the organic farming movement. As early as the 1930s, at least two rural experiments that combined nonchemical agriculture with communal living had emerged. One was associated with Ralph Borsodi; the other with Scott Nearing. Borsodi was avowedly antagonistic to capitalism and favored decentralized subsistence agriculture, not a reinvigoration of the one- or two-crop capitalist family farm (Beeman 1995). Nearing was a disaffected radical academic who through fifty years of “homesteading” with his partner, Helen, became an icon of the counterculture (Jacob 1997). Both served as models for a new back-to-the-land movement that started in the late 1960s.

By 1965, the so-called New Left—differentiated from the Old Left by interest in decentralized, utopian, and non-class-based forms of political action—was looking at alternative institutions as a way of modeling social change (Gottleib 1993). Between 1965 and 1970, disaffected urban radicals formed thirty-five hundred communes in the U.S. countryside, where small groups of individuals and families pooled their resources to create subsistence-style farms (Belasco 1989). Most of these communes practiced what were later codified as organic techniques, not necessarily by intention, but because self-sufficiency was a cornerstone of their ideology. Though their success was marginal at best—many of the failures were attributed to shortages of food—what was radical was the link between an alternative farming system and a collective form of ownership. Following the Nearings’ path, there was also a significant migration to rural areas of individual families who sought a more private existence, mostly on privately owned land (Jacob 1997).

The urban component of food politics was equally critical, not only modeling alternative food-delivery institutions, but also forging direct links with the countryside. Food cooperatives, which involved direct employee ownership and management of retail stores or food businesses (many of which were bakeries), and so-called food conspiracies, in which members pooled money and bought weekly from nearby suppliers, became commonplace in many cities and college towns. Between 1969 and 1979, five thousand to ten thousand such institutions were established, grossing more than \$500 million a year (Belasco 1989). Many linked up with nearby organic farms as sources of supply. In addition, many paid at least vague attention to issues of hunger and poverty, of-

fering discount prices to low-income consumers, food-for-work programs, or even free handouts.

During this period, *organic* most clearly became understood as a critique. According to Belasco, *organic* and *natural* were used more or less interchangeably, although *organic* had “wider implications,” since it addressed not only what happens during factory processing but also what occurs at the farm. Organic agriculture was envisioned as a system of small-scale local suppliers whose direct marketing, minimal processing, and alternative forms of ownership explicitly challenged the established food system. Thus, the “organic paradigm” straddled three countercurrents: “therapeutic self-enhancement, consumerist self-protection, and alternative production. . . . Organically raised food required a completely new system of food production and distribution, and with that, major social decentralization” (1989, 69). So, while the “countercuisine” incorporated several different themes—including survivalist (i.e., getting along on little), antimodernist (i.e., valorizing craft production), “health foodist,” or explicit criticism of the food industry—*organic* agriculture was considered oppositional indeed.

The fourth movement to contribute substantially to the ideology of the organic farming movement is environmentalism, although not as directly as one might imagine. Rachel Carson’s publication of *Silent Spring* in 1962 is considered by many to be the birth of the modern U.S. environmental movement, but it did not immediately awaken significant interest in organic agriculture. Carson put considerable distance between herself and the organic movement. For its part, the U.S. environmental movement was focused on the conservation of pristine nature at the expense of other environmental considerations and did not take seriously Carson’s pronouncements of the dangers of pesticide use (Gottlieb 1993).

By 1970, the year of the first Earth Day, the environmental movement had broadened its issue base. A groundswell of apocalyptic thinking, sparked by stories of famine in South Asia and Africa, pronouncements of uncontrollable population growth, and the experience of the worldwide oil crisis of 1973, reignited concerns about energy use and the finiteness of resources in general. These typically neo-Malthusian concerns, along with on-the-ground failures of the green revolution, gave birth to “sustainable development,” the idea that economic development had to proceed with attention to the resource needs of future generations. In some circles, notions of sustainability also incorporated social justice concerns, particularly to the extent that existing poverty was linked with environmental degradation.<sup>9</sup> A key treatise of this era was Francis Moore

Lappé's *Diet for a Small Planet* (1971), an argument for vegetarianism that based its claim on the resource intensiveness of the feed grain–live-stock complex and its implications for world hunger. This justification for vegetarianism was particularly powerful in moving the emphasis out of the realm of individual ethics to the international political economy of agriculture. The implicit link between vegetarianism and organic agriculture arguably imbued the latter with similar justification.

Another way in which the idea of sustainable development has influenced organic farming is through the “appropriate technology” movement, emboldened by E.F. Schumacher's slogan “small is beautiful” (Buttel 1994). The gist of the appropriate technology critique is the notion that technology and science have been captured by large state and agribusiness interests. Were the institutions that produce and disseminate technology more decentralized and popularly controlled, they would better serve those excluded from or hurt by so-called big science. The failure of earlier utopian experiments in actually producing food reinforced the idea that more attention had to be paid to the science of agriculture (Levenstein 1993). New Alchemy Institute, a Massachusetts-based ecological think tank formed in the early 1970s, was one such institution established to meet that goal; its purpose was to make small-scale farming and other smallholding ventures viable (Belasco 1989; Peters 1979).

In addition, the organic farming movement has drawn from the more recently articulated environmentalist notion of bioregionalism (Sale 1985; Kloppenberg, Henrickson, and Stevenson 1996). The appropriation of the idea of “foodsheds”—a term that plays on John Wesley Powell's exhortations regarding the importance of watershed-based regions (see Stegner 1953)—is to draw attention to seasonality and other agronomic constraints, which, if followed, presumably would put less pressure on land and other elements of nature. Locally scaled distribution networks might also substantially reduce the number of “food miles” necessary for trading food, leading to a dramatic savings of fossil fuel energy. Insofar as the globalization of food distribution has turned on overcoming obstacles of distance and durability (Friedmann 1994), bioregionalist notions also intersect with a critique of globalization.<sup>10</sup>

The “scientization” of the environmental movement—as scientific legitimacy has routinely been attached to claims of environmental degradation—has also given organic farming heretofore missing legitimacy (Buttel 1992). The energy crisis of the early 1970s opened up scientific discussion of the relationship between energy and agriculture. Subsequently, the National Science Foundation funded a study that compared



organic and conventional farming systems. Its chief investigator, William Lockeretz, had been trained in physics and thus had credentials in mainstream science. The study, published in 1975, demonstrated that organic systems use less energy derived from fossil fuels. Then a USDA report gave what Beeman (1995) termed as “grudging respect” to organic agriculture by dismissing previous misconceptions and noting the scientific methods being employed in organic farms (Beeman 1995). Separately, the scientific linkage of pesticides with cancer, ozone depletion, and other such horrors, though ceaselessly contested, continued to generate careful scrutiny of agricultural chemicals, even though regulation of these chemicals remained woefully inadequate.

This link to science potentially has undermined the radical critique of industrial agriculture that all four formative movements have in some sense shared. The increased support of science has reinforced a technical approach to environmental problem solving, relegating social issues to the status quo (Buttel 1994).<sup>11</sup> But what of the agrarianist vision for organic agriculture? How does it stand in relation to these formative movements?

#### THE AGRARIANIST VISION

A mind overloaded with work, which in agriculture means too much acreage, covers the place like a stretched membrane—too short in some places, broken by strain in others, too thin everywhere. The overloaded mind tries to solve its problems by oversimplifying itself and its place—that is, by industrialization. It ceases to work at the necessary likeness between the processes of farming and the processes of nature and beings to order the farm on the assumption that it should and can be like a factory. It gives up diversity for monoculture. It gives up the complex strategies of independence (the use of manure, of crop rotations, of solar and animal power, etc.) for a simple dependence on industrial suppliers (and on credit).

Wendell Berry, “Whose Head Is the Farmer Using?  
Whose Head Is Using the Farmer?”

We must see again, as I think the founders of our government saw, that the most appropriate governmental powers are negative—those, that is, that protect the

small and weak from the great and powerful. . . . the governmental power that can be used most effectively to assure the equitable distribution of property, which alone can give some measure of strength and independence to ordinary citizens, is that of taxation. As our present economy clearly shows, the small can survive only if the great are restrained.

Wendell Berry, *The Unsettling of America*

Cutting across all four of the movements mentioned, contemporary agrarian populism shares many of the same elements of this broadly construed “industrialization” critique, in, for example, its concern with corporate power, the role of big science in agro-industrialization, and the implicit links between the social organization of farming and ecological outcomes. A key difference, though, is that agrarian populism specifically locates these problems with the growth and consolidation of the corporate input and food processing sectors *at the expense of the family farm*. As such, the new agrarianism sees the family-owned and -operated, small-scale farm as the locus of, indeed the key to, social justice and ecological sustainability.<sup>12</sup> Moreover, and in contrast to the counterculture critique, it places tremendous value on farmer independence rather than collective action.

The agrarian vision is, of course, deeply rooted in U.S. political and cultural history and has emerged repeatedly as a trope of anticorporate sentiment. It originated with Thomas Jefferson, who opposed the centralized power sought by the Federalists. He preferred a weak federal government and argued that only agriculture and landownership could ensure independence and virtue, thereby providing the basis for a republican democracy (White 1991, 63). The vision of a nation of small, like-sized, and, ultimately, white farmers undergirded the clearance of Indians, as well as the major land giveaways of the nineteenth century, including the Homestead Act of 1862. After the so-called closing of the frontier, agrarianism was revitalized during the populist moment of the 1890s, when western farmers fought the monopoly power of the railroads and middlemen. Agrarianism saw another resurgence after the dust bowl tragedy of the 1930s, when the dust storms were attributed to agricultural consolidation and mechanization, which had pushed poor tenant farmers west to become “sodbusters” (Worster 1979). The link between ecology and farm structure first articulated by the permanent agriculture movement evolved into a call for reinvigoration of the family unit of production.

This battle cry was taken up by Wendell Berry, who became a key spokesperson for the agrarianist vision in the latter part of the twentieth century. He explained the problem of soil degradation specifically in terms of an ecological breakdown of the grain-based family farming unit, which had been compelled to overproduce to make up for falling prices, exhausting its presumably freehold land. Wes Jackson, currently affiliated with the Land Institute in Kansas, became another carrier of these arguments, also emphasizing notions of cultural renewal and ethical revival (Beeman 1995). Jackson and Berry continue to be influential. The coupling of sustainable agriculture with the salvation of the family farm is explicitly spelled out in Marty Strange's 1988 book, *Family Farming: A New Economic Vision*.

Because the agrarianist vision has become so potent within organic agriculture, it is worth elaborating the assumptions underlying the descriptors of "the family-owned and -operated, small-scale farm." First, freehold ownership is the desired form of land tenure, as it putatively provides the basis of economic security and, hence, farmer independence. Drawing from Locke's political philosophy positing that he who mixes his labor with land to put it to productive use is the rightful owner, the specific norm here is a yeoman farmer, one who works his own land and nothing more. In newer iterations of agrarianism, notions of individual ownership are also tightly coupled with notions of stewardship; only owners, it is presumed, have interest in the long-term viability of the land.<sup>13</sup> As Strange puts it, the family-owned farm "encourages (imperfectly) the responsible use of resources" (1984, 19). Then, in return for valuing the long-term fertility of the farm and practicing ecological farming methods, the farmer-owner will generate greater returns in the market and stave off the demise of this family-owned farm.

The agrarian ideal is also an owner-operated farm, self-sufficient to the extent that family members provide all the necessary labor, and farm income is sufficient to pay all farm and family needs. In the more explicitly Christian vision of Berry, the household is the last bastion against cultural estrangement (Berry 1986).<sup>14</sup> In the more secularized version, "farms are family centered because the family is the logical unit of production within which to transfer skills and to provide inter-generational continuity in the farm's management" (Strange 1984, 118). Either way, hiring outside labor is considered a sort of moral failing. The ecological link is that a diversified cropping system ostensibly smoothes labor demands, mitigates market risks, and reduces the need for inputs, thereby

improving the possibilities of meeting the condition of family operatorship (Strange 1988).

The small scale of such farms is equally critical to this vision. Not only is smallness considered a social good in its own right; this norm also assumes a symbiosis between the scale of a unit of production and its ecological ramifications. “A healthy farm not only will have the right proportion of plants and animals; it will have the right proportion of people. There will not be so many as to impoverish themselves and the farm, but there will be enough to care for it fully and properly without overwork” (Berry 1986, 182). A farm with too many acres will also give way to simplification, the progenitor of ecological destruction. Jackson sees the problem as one of information management. As he puts it, the inevitable loss of biological diversity in a managed farm means that “the price for sustainability must be paid from elsewhere. [One must] substitute cultural information for biological information” (1984, 226). The necessity of a low “eyes-to-crop ratio” is one of the reasons that the family farm is seen as the ideal organizational form. This assumes, of course, that only family members are seen as adequately enfranchised to monitor and act on what happens in the field.<sup>15</sup>

Finally, the new agrarianism, like all agrarian populism, is deeply suspicious of state intervention, does not question the individuation of markets, and, most fundamentally, remains a defense of private property (Brass 1997). So, deeply suspect of scientific and bureaucratic rationality precisely for its effect on the social aspects of farming, the agrarianist social vision could be construed as deeply conservative. Yet, these last qualities are exactly what has made it so attractive to the organic farming movement. The organic movement has always been distrustful of government intervention, given the ways that federal farm programs and the USDA have encouraged and even subsidized the worst sort of farming practices. Many back-to-the-landers, moreover, value their independence and have become property owners themselves.

In short, many in the organic movement have come to embrace these elements of the new agrarianism, equating both social justice and ecological sustainability with small-scale family farming. Because of this conceptualization, the movement has come to focus largely on *form*, in particular the proportionality of big farms versus small farms. Instead, as this book will show, the movement would do better to pay attention to the *processes* of social and ecological exploitation that gave rise to the organic critique in the first place.

## THE PLACE OF CALIFORNIA

I'm a small family farmer in the Central Valley. . . .  
Organic farming is a way of gaining independence from  
the corporate structures that undermine the agrarian  
tradition.

Ted Willey, T & D Willey Farms, California Studies  
Conference, San Francisco State University,  
February 1997

California never had much of an agrarian smallholder tradition. Land was never farmed in a mode resembling premodern peasant societies. Most California native groups were not agriculturists, and the relics of mission agriculture were mostly eradicated shortly after statehood in 1848. Nor was California settled by a large class of landowning farmers who had holdings of similar size and nature, where family members performed the necessary labor. Large landholdings became the basis of farming from shortly after the gold rush, when an elite few brought much of its hinterland under monopolistic control (McWilliams [1935] 1971; Liebman 1997). When these landholdings were finally split up in the late part of the nineteenth century, they were made viable by intensive and specialized fruit production, which fundamentally depended on hired labor, racialized and marginalized to ensure the cheapness and flexibility to meet intermittent labor requirements (Almaguer 1994; Daniel 1981; Leibman 1983; among others). In other words, California agriculture was industrial from the get-go, characterized by what Carey McWilliams termed “factories in the field,” an observation echoed by the likes of Walter Goldschmidt and John Steinbeck, two other published critics of California’s industrial agriculture.

Today, California ranks sixth among nations in its agricultural economy and has been the number-one agricultural state in the United States for more than fifty years. Its 1997 output was \$26.8 billion, approximately 10 percent of total U.S. production, with Texas a distant second at \$15.9 billion. This rank is largely due to California’s preeminence in high-value specialty-crop production; that same year it accounted for more than half of all U.S. production in fruit, nut, and vegetable crops and exported 20 percent of what it grew (California Department of Food and Agriculture 2000). Furthermore, all this production took place on only 3 percent of the state’s acreage, suggesting an extraordinary degree of intensification (U.S. Bureau of the Census 1999). California has led the way in technologies that both reduce the risks of nature and speed up crop turnover, from cooperative fruit marketing, plant breeding, bi-

ological control, in-field transplant and harvest mechanization, to the generous use of petroleum-based fertilizers. California has the highest rate of pesticide application in the country (Liebman 1997).

As for the agricultural landscape, it is marked by

fields and orchards [that] were designed to produce great quantities of cheap food. And to accomplish that . . . there must be high-input industrial efficiency. Fields are laser-leveled as flat as tabletops. Rows are precision-spaced with food crops bred to accommodate machinery and to last on store shelves. First the earth is drilled with synthetic fertilizers developed from the same research that perfected explosives and poison gas in World War II and then it's pumped with fumigants and doused with herbicides to inhibit soil-borne disease and retard the growth of weeds. Crops are sprayed and dusted with broad-spectrum insecticides that kill harmful insects, along with most others, in order to maintain high yields and guarantee consistency of appearance. (Ableman 1993, 74)

You assume these are farms, but this is not what you see when you close your eyes and think "farms." Farms are in the country and this is definitely not the country. . . . Only the cars and trucks that occasionally speed by along the two-lane roads that frame these anonymous fields suggest human life. (68)

Finally, virtually all farms are organized as capitalist enterprises, relying heavily on the employment of wage labor.<sup>16</sup> But this sort of observation has never stopped agriculturists from evoking agrarian dreams; to be sure, the rhetoric of the family farm remains pervasive. Victor Davis Hanson, a fruit grower (i.e., de facto employer) and classics scholar, in *Field without Dreams* (1996), laments, "The American yeoman is doomed; his end is part of an evolution of long duration; and so for historical purposes his last generation provides a unique view of the world—a superior view I will argue—that is to be no more" (xi). Later, "the most perilous family farms seem to be those in our own size range, between 80 and 200 acres" (266).

### *Organic California*

Just as California agriculture has been characterized as "the great exception" (McWilliams 1949), so can the same be said for organic agriculture within California. For alongside this industrial rurality arose one of the most countercultural branches of the organic farming movement. Predominantly urban in origin, many of California's first organic farmers were first-generation growers who saw organic farming as an explicit antidote to the excesses of industrial agriculture. In the interests of creating a different kind of agrarian dream, these growers carved their farms from the leftover spaces—the hillsides, pastures, abandoned or-

chards, urban sand lots, and tiny river valleys—making “farms” of one, two, or perhaps ten arable acres. Farming to them was not a business but a lifestyle. Having such small farms, some households were able to do all the work themselves; others relied on the occasional support of neighbors, visiting friends, and interested college students. They grew basic fruits and vegetables such as apples, oranges, peaches, lettuce, carrots, and tomatoes. They made their own compost from kitchen scraps, cow or horse manure, and the inedible portions of the crops they grew. They rarely worried about bugs or fungi, content to grow fruit with a few worms and blemishes and vegetables with holey leaves. Most of the produce was sold to local health food stores and food cooperatives, where customers did not expect their purchases to be cosmetically perfect. Indeed, perfection would be cause to doubt that they were grown organically.

These farms did not just spring up out of the blue. California had long hosted the sort of experimentation that gave rise to the organic farming movement. Southern California, for example, was a formative center of the health food movement. As early as the 1870s, people suffering from tuberculosis and other such infirmities began migrating to southern California for the sunny climate and restful nights; sanatoriums and health resorts were built all over the region. Many “health seekers” went into small-scale beekeeping and citrus farming, then seen as the perfect profession for the elderly and infirm (Baur 1959). Well before the 1960s revolution, southern California was sprinkled with health food stores.

The San Francisco Bay Area, meanwhile, was a key node for what Belasco called the “counter-cuisine.” The San Francisco-based Diggers gave out free food to urban dwellers in city parks, procuring their produce from Morning Star Ranch, a nearby organic farm. Far-Fetched Foods, a health food store in San Francisco’s Haight Ashbury district, sought organic truck gardeners as sources of supply. Hundreds of other food cooperatives, collectively run bakeries, and alternative restaurants thrived there as well.

Most famously, in 1971 Alice Waters opened a small café in Berkeley, California, named it *Chez Panisse*, and began to serve simple meals to her friends. Feeling that the best food was made from fresh, local, and seasonal ingredients, Waters bought most of her produce from local farms and was the first to put “organic” on the menu in what later came to be a world-renowned culinary institution. There is little question that Alice Waters pioneered a revolution in food tastes, not only inventing “California cuisine,” but also, through her penchant, bringing local, organi-

cally produced food into the mix. Waters inspired a rash of imitation—many Bay Area chefs trained with Waters and went on to open their own restaurants and become celebrity chefs in their own right—and quite instrumentally contributed to the diffusion of organic consumption.<sup>17</sup>

The alternative production movement also had its adherents in California. In 1967, Alan Chadwick, a British-born Shakespearean actor, began a garden club at the University of California at Santa Cruz based on the premise that gardening is best done without chemical pesticides and fertilizers (Gaura 1997). Eventually the garden expanded to a twenty-five-acre farm and became the only university-run research and extension service devoted solely to organics. The program was decidedly countercultural; prevailing leftish political sentiments and a cultural milieu of what Belasco (1989) called “communal bare bones living, vegetarianism, and sexual and pharmaceutical libertarianism” created an image for organic farming that lasted long after the 1960s had passed. Nevertheless, the program played an important role in diffusing organic farming. Not only were many organic technologies tried, tested, and extended through the now-named Center for Agroecology and Sustainable Food Systems, but also its apprenticeship program spawned many private farms as well as public service gardening and farming programs.

As a result, Santa Cruz, in particular, was to become a center for the California organic farming movement as it began to take more institutional forms. The first certification agency, California Certified Organic Farmers (CCOF), began there in 1973 as a grassroots organization of small organic farmers. In 1990, Bob Scowcroft and Mark Lipson, formerly of CCOF, started the Organic Farming Research Foundation with the purpose of fostering the improvement and widespread adoption of organic farming practices (OFRF 1999).

Somewhat later, a second node of the California organic farming movement materialized in Yolo County, in proximity to the University of California at Davis (in spite of its teaching and research emphasis on industrialized farming).<sup>18</sup> In the late 1970s, graduates of UC Davis started the California Action Project—later to become the California Action Network (CAN)—to promote organic and sustainable agriculture. So that CAN could focus on advocacy and legislative work, a second organization was created to be the research arm: the California Institute of Rural Studies (CIRS), under the leadership of Don Villarejo. With the aid of California Rural Legal Assistance, these two organizations brought a lawsuit against the University of California for failing to fulfill its land grant mission by solely promoting large-scale chemical-intensive agri-



culture. Although the plaintiffs lost in appeal, as a result of this suit, the university created the Small Farm Center at UC Davis and funded the agroecology program at UC Santa Cruz.

Later, CAN was to change its name to CAFF (Community Alliance with Family Farmers) and take on a more explicitly agrarian agenda, emphasizing “family farms as the cornerstone of healthy communities.” CAFF was also active in getting the federal Sustainable Agriculture Research and Education bill passed. When it received its first congressional appropriations in 1988, CAFF helped start the Sustainable Agriculture Research and Education Program at UC Davis (UC-SAREP), an organization dedicated to expanding and disseminating technical knowledge on ecological methods, as well as promoting socially responsible practices and policies. Following a divergent course, CIRS bolstered its focus on farmworker justice, although all of these Yolo County–based organizations continued to collaborate, especially in the area of ecological farming and pesticide reduction.

Meanwhile, Paul Muller and Dru Rivers, the latter of whom had helped found the organic student farm at UC Davis, met at the 1982 annual ecological farming conference, held at the Asilomar conference center. They began Full Belly Farms, choosing the Capay Valley, on the west side of Yolo County, for its beauty, pockets of rich soil, and relatively clean water from Cache Creek. The modal size of Capay Valley farms also suggested the possibility for a community of like-minded farmers (Kraus 1991). In 1989, Muller and Rivers took on as partners Judith Redmond, former executive director of CAFF, and Raoul Adamchak, who also had worked in organic farming organizations. Together, they pioneered the subscription farm, a version of community supported agriculture (CSA), which was to become the California model for directly linking farms with consumers.<sup>19</sup>

In short, California played a formative role in the development of the organic farming movement, as the site of several key institutions that were critical in diffusing the techniques and meanings of organic farming, and as the place where regulations for organic production first evolved. And though agrarian populism tended to dominate the more broadly defined U.S. sustainable agriculture movement, the California organic movement was, at least initially, more countercultural, borrowing heavily from the New Left critique of the 1960s. This ideological sway was largely the result of the California organic movement’s growth from urban sources, reflecting California’s high degree of urbanization and the deep economic conservatism of much of the state’s farming pop-

ulation. Arguably, it also resulted from California agriculture representing the very pinnacle of the sort of agricultural industrialization that the organic movement sought to criticize.

Today, California holds far more organic farms than any other state (extrapolated from Klonsky and Tourte 1998b), is second to Idaho in the amount of certified organic cropland, and grows 47 percent of the certified organic vegetables in the country and 66 percent of the organic fruits (Economic Research Service 2000b). It is safe to assume that California is a world leader in the value of organic crops sold, given both the high value of produce crops and the projection that the United States as a whole was to have 40 percent of world sales in 2000 (El Feki 2000). California's organic agriculture, in this way, has come to parallel the economic success of the state's agriculture in general. The possibility that California's organic agriculture is as exceptional as the state's style of industrial agriculture, which it seeks to counter, speaks to its importance in setting wider trends for the rest of the world. For that reason alone, it is important to examine the outcome of this experimental cross between a putatively radical social movement and the most industrial agriculture in the world.

## THE STUDY

This book draws from the first extensive, in-depth social science study of organic production in California. The project emerged from earlier, more preliminary research on northern California's organic vegetable sector that I conducted with two colleagues in the fall of 1995 (Buck, Getz, and Guthman 1996, 1997). At the time, we found a significant disjuncture between the discourses of organic farming and what was taking place in the fields, warehouses, and markets that constitute the organic vegetable commodity chain. Our impression was that the highest-value crops and the most lucrative segments of such chains were being appropriated by agribusiness firms, many of which were abandoning the putatively sustainable agronomic and marketing practices associated with organic agriculture, such as composting and direct marketing.

The much larger study on which this book is based was designed to examine that apparent anomaly in more depth: to understand how the organic sector evolved in the way that it did, to see if obvious patterns exist in the organization and practices of production, and, finally, to look at how the regulatory mechanisms that define what it is to be organic in-

fluence the structure of the sector and the ways in which production is individually managed. My findings modify our original insight considerably. For one thing, traditional agribusiness entry has been fairly protracted and remains limited. However, the organic movement has sprouted its own industry, raising the question of how agribusiness came to be replicated in the organic sector. For another thing, and more important, the original study suggested that agribusiness producers are the only ones altering the practices of organic farming. This study shows that agribusiness's impacts are more far-reaching. One might ask how agribusiness involvement in organics affects even those who strive to do things differently.

In 1997, the baseline year for the statistical portion of this study, there were 1,533 organic growers registered with the state of California, 374 (32 percent) more than the first official count in 1992 (Klonsky et al. 2001; Klonsky and Tourte 1995). There were 67,826 acres in organic production, 22,333 (49 percent) more than in 1992, and reported gross sales of \$158 million, \$83 million (111 percent) more than in 1992.<sup>20</sup> Fruit, nut, and vegetable crops accounted for 92 percent of total organic sales and 74 percent of organic acreage (Klonsky et al. 2001). In certified acreage, grapes were the most prevalent crop, followed by rice, mixed vegetables, safflower, lettuce, tree nuts, citrus, and tomatoes (Economic Research Service 2000b).

The study involved compiling survey and archival data on all 1,533 growers. The qualitative portion was primarily based on interviews with 150 growers, attendance at industry conferences, and interviews with regulatory agents, technical experts, and industry advocates. Virtually all interviews took place in 1998 and 1999. It is important to note that the grower interviews were not taken from a random sample. Instead, the sample was purposefully stratified according to region, crop mix, scale of operation, and certification status, precisely to evaluate the ways in which these variables matter in terms of practice. Most significant, a large number of what I call mixed growers (i.e., growers with both conventional and organic acreage) were sampled to better understand the dynamics of conversion to organic production, as well as to assess this prior claim of agribusiness appropriation. Moreover, the sample of mixed growers serves as a proxy to compare conventional and organic growers. Readers should refer to the appendix for a further discussion of the research approach.

## THE BOOK

The story of organic agriculture's origins presented so far was designed to account for the radical origins of organic farming. Yet, embedded in the movements I have just discussed were people and ideas that brought heretofore missing legitimacy to organic agriculture. Most significant among them was the growing acceptance of environmentalism. As suggested above, increased public concern with the environmental and health effects of industrial farming was already generating support for organic farming in the late 1970s and early 1980s. This concern was sharpened with two chemical-related food scares in the late 1980s, regarding the use of Aldicarb and Alar.<sup>21</sup>

In addition, the 1980s saw significant changes in diet and food taste, generated by a complicated interplay of the growth of a higher income-earning professional class, breakthroughs in nutritional science, heightened global travel and migration (leading to interest in exotic and ethnic foods), and enhanced concern with bodily health (Levenstein 1993). Organic food became more desirable for its association with health food, to be sure, but also for its association with gourmet food, thanks to chef-led advocacy of organics. In particular, the gentrification of organic food, spurred, in part, by the Alice Waters diaspora, gave organic food entirely new meanings, ultimately imbuing it with more market value as well (Guthman 2003). These changes, along with the hard work of organic advocates bent on institutional legitimacy, substantially modulated organic farming's contrarian bent. Effectively, the way was cleared for an entirely new set of actors to participate in organic production.

This, then, is where my analysis picks up again, to investigate the material forces that generated such unprecedented growth and, consequently, change in the organic sector. For, I argue, it is only because these ideational shifts articulated so strongly with changes in agrarian capitalism and its regulation that erstwhile conventional growers began to experiment with organic production beginning in the 1980s. Chapter 2 details the motivations for these conversions in the context of major restructuring and regulatory changes within the global agrofood economy. Chapter 3 looks at the structure and practices of the actual existing organic sector—outcomes of this recent growth—in regard to how organic agriculture is often imagined.

Still, the analysis previewed thus far addresses only the proximate causes of organic agriculture's transformation. One might be left wondering if organic agriculture would have strayed from its ideals without

these grower conversions. The ensuing analysis seeks to answer this question. It delves into the respective logics of agrarian capitalism (as it evolved in California) and regulation (as it evolved within the organic sector) to illustrate how they directly shaped organic production, particularly when they intersected in unexpected ways.

Chapters 4 and 5, accordingly, focus on the development of agrarian capitalism in California and its legacies for organic farming. Chapter 4 recapitulates California's agrarian history through the lens of three processes that have characterized industrialization in California agriculture—what I will call intensification, appropriation, and valorization. Chapter 5 considers the uneven spatial development of California agriculture to illustrate how it has affected organic agriculture.

Chapters 6 and 7 turn to the effects of regulation. But, as opposed to consideration in chapter 2, which looks at how regulation external to the organic sector helped spur its growth, these chapters consider the effects of a regulatory framework that was largely of the organic sector's own choosing. Chapter 6 describes the origins and current character of organic regulation, in both its substance and its institutional support.<sup>22</sup> Chapter 7 analyzes the ramifications of these now-codified definitions of organic, in terms of both grower practices and industry structure.

As the organic sector has transformed to become what Michael Pollan dubbed “the organic-industrial complex” (2001b), two responses have emerged. Some, notably those who identify with an organic *industry*, counter that organic agriculture was never meant to engender a systemic reconstruction of the entire food system but instead had the more modest goal of a more ecologically benign and healthier food supply. The effort to promote a positive alternative is laudable, yet adherents of this perspective ignore the crucial question of how the existing structural conditions of agriculture potentially limit organic farming's success even in these more modest terms.

The other response comes from those who identify with the *movement*. Disappointed with the direction organic agriculture has taken, they offer a particularly *agrarian* answer, saying that the resuscitation of the small family farm will make for healthier food, better working conditions, and locally scaled distribution (e.g., Cummings 1998). This book challenges the agrarian vision as well. My contention is that the new agrarianism, while representing the most currently popular alternative vision of organic farming, is off the mark in its critique of agricultural industrialization, including that applied to organic agriculture. The conclusion of the book, chapter 9, is effectively a retort to both positions. In

addition, I ask if there are other, more productive roads toward a more ecologically benign and socially just agriculture.

This occasionally harsh treatment of organic agriculture, and by implication many who advocate it, is likely to create a good deal of controversy, for there are people who would like to discredit organic agriculture permanently. I do not count myself among them, nor is that the purpose of this book. The fact is that I do buy and eat organic food—with a good deal of conviction, at that. Despite the inconsistencies in what are considered allowable inputs, there is no question in my mind that, as a rule, organic producers are exposing farmworkers, neighbors, and eaters to far less toxicity than their conventional counterparts are. The reader will discover that I am not convinced, however, that organic agriculture *as it is currently constructed* provides a trenchant alternative to the interwoven mechanisms that simultaneously bring hunger and surplus, waste and danger, and wealth and poverty in the ways food is grown, processed, and traded. This is the primary question I wish to explore in this book.