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Mark Lipson

Photo by Tana Butler

Senior Analyst and Policy Program Director,

Organic Farming Research Foundation

Mark Lipson is senior analyst and policy program director for the Organic Farming Research Foundation (OFRF). In these interviews, conducted by Ellen Farmer at Molino Creek Farm on June 5, August 25, and December 21, 2007, Lipson describes his long and productive career working on behalf of organic farming policy at the state and federal levels.

As an environmental studies major at UC Santa Cruz in the late 1970s and early 1980s, Lipson focused on planning and public policy, addressing issues such as offshore oil drilling on the California coast. While he was a student, he helped found a student housing co-op, and served as president of

Our Neighborhood Food Co-op, a natural foods store that eventually morphed into New Leaf Community Market. After graduation, this involvement with the co-op movement inspired Lipson to help organize Molino Creek, a co-operative farming community located in the hills above the ocean near Davenport, California. Molino Creek pioneered the growing of flavorful, dry-farmed tomatoes (grown without irrigation).

Seeking organic certification for Molino Creek, Lipson began attending meetings of the California Certified Organic Farmers (CCOF). He soon became CCOF's first paid staff member, working there from 1985 to 1992, steering the organization through the establishment of a statewide office as well as several key historical events that awakened the American public's interest in organic food. The Organic Center calls Lipson "the primary midwife" of the California Organic Foods Act (COFA) of 1990, sponsored by then-State Assemblymember Sam Farr. Recalling his work with Lipson on COFA, Sam Farr remarked (in his oral history in this series), "I tell the world that the organic movement started in California, in Santa Cruz County, and the guru of that is Mark [Lipson]."

Over the past two decades with OFRF (an organization which he helped to found), Lipson shepherded several historic changes in agricultural funding through Congress, such as a 2008 Farm Bill that secures a five-fold increase in government funding for organic research (though this still represents only one percent of the USDA's research budget). He is perhaps best known as the author of the 1997 study Searching for the 'O-Word'*, which documented the absence of publicly funded organic research at a critical political moment in the trajectory of the organic farming movement.*

Lipson chaired the California Organic Foods Advisory Board from 1991 to 1998. In 1992, he received the annual Sustie ("Steward of Sustainable Agriculture") Award, presented at the Ecological Farming Conference, and in 2009 Nutrition Business Journal *gave him their Organic Excellence award.*

Additional Resources:

Mark Lipson, *Searching for the "O-Word": An Analysis of the USDA Current Research Information System (CRIS) for Pertinence to Organic Farming*. Available online at http://ofrf.org/publications/o-word.html

Organic Farming Research Foundation: http://ofrf.org/index.html

California Certified Organic Farmers (website on CCOF history): http://www.ccof.org/history_mr.php

Molino Creek Farm: http://www.molinocreek.com/

Beginnings

Farmer: Today is June 5th, 2007, and I'm here with Mark Lipson to talk about organic [farming] policy. But first I want to get a little background on you personally. So, the first question is: where were you born, and where did you grow up?

Lipson: I was born in Oakland, California, at Kaiser Hospital, but I grew up all over the country. My dad was an academic, and was authority-challenged, I guess. He was a post-doc at Berkeley when I was born. We moved to Canada, to Edmonton, Alberta; came back to California; went to Pittsburgh, was there from five to twelve; moved to southern Florida, to Fort Lauderdale, was there from twelve to sixteen; lived for a little while in the suburbs of Washington, D.C.; then moved to the North Shore 'burbs of Chicago, went to high school there and graduated in '74.

Farmer: Can you describe your education and formative experiences?

Lipson: Well, I moved around a lot (laughter), and that certainly was formative in some way. High school, I was mostly involved in fine art photography.

Certainly involved in a lot of kind of early (well, for me it was early) anti-war, Vietnam protests. I was doing that when I was in ninth grade, 1970, ’69 even, end of eighth grade. So I was mostly involved with the art photography stuff during high school. That was my main preoccupation. I didn’t go right to college. I took a couple years off, hitchhiked around the country, a pretty classic Kerouac *On the Road* kind of thing. Hitchhiked all over the country, rode freight trains for some of that.

Farmer: Was that by yourself?

Lipson: Yes. I graduated a semester early from high school. Then I was living in the city, with some friends. We moved down and were the first little wedge of gentrification in a really funky neighborhood on the north side of Chicago, which probably is really, *really* nice and upscale now. And then I started going to school at University of Illinois in Chicago, Circle Campus, but after two quarters there I went into the hospital to have my aortic heart valve replaced. This was diagnosed when I was very young, aortic insufficiency and stenosis. They always said, “Well, when you’re in your teenage years, late adolescence, that’s when the ventricle starts to enlarge, and we’ll have to replace it.” So I did. I went to Birmingham, Alabama, to have my valve job. I had just turned twenty, and just celebrated my thirtieth anniversary of that!

Farmer: Yeah! They only did it once?

Lipson: Only did it once, didn’t have to have any recall. They went back to the design I have, after trying several others that weren’t as reliable. So it’ll last

longer than I will. When I was recuperating from the surgery, I applied to [UC] Santa Cruz and that's what got me out here.

Farmer: So you were sort of a late freshman coming into UCSC.

Lipson: Yes, I was already twenty-one, with only one semester of undergrad work. Got here in fall of '77. Spent the summer before that working in San Francisco with friends of mine from Chicago who were living out here. I'd gotten focused on environmental issues while I was in Chicago. I was taking an environmental studies course at the University of Illinois, Chicago campus.

UCSC Environmental Studies

While I had been hitchhiking around, I had come through Santa Cruz and heard about the environmental studies program there, and the Farm and Garden. That had stuck in my mind. So I applied to Santa Cruz, got into the environmental studies program, and very quickly got sucked into the amazing group of faculty there—Jim Pepper, Ken Norris, Dick Cooley, Paul Niebanck—all those guys. To say nothing of Ray Dasmann and Stanley Cain.[1] Those guys were such giants. I think it was kind of a golden age for the environmental studies program, right then, because it was very real-world oriented, and the students were out all over the place, all over the world, doing stuff.

My second quarter there I got involved with offshore oil drilling. That was the first prospect of there being offshore oil drilling off the Central Coast here. So with a couple other students, I got into an internship with AMBAG, the Association of Monterey Bay Area Governments, preparing AMBAG's comments

to the Department of [the] Interior on the first call of the question for offshore oil leases. That was right when Save Our Shores got started, so we were interacting with Kim Tschantz and the folks who started Save Our Shores. Right from the very beginning, there was this assumption of doing stuff in the real world. There were no purely academic exercises.

Farmer: And you were right away working in policy, it sounds like.

Lipson: Yes, I went right into the Planning and Public Policy track [in environmental studies], which was just the way it went. I had interests in political organizing, had read some Saul Alinsky. So I missed out on all the cool natural history stuff and—

Farmer: You didn't go on the [Natural History] Field Quarter.

Lipson: Never did the field quarter.

Farmer: What about the Farm and Garden. Were you involved at all?

Lipson: No, I wasn't really, until later. No, the other thing I got into right away was co-op organizing. It was also in my second quarter. I was taking a class from Jim Pepper on planning, and we started this discussion about housing and housing co-operatives, and why wasn't there a student housing co-op in Santa Cruz? It was a big feature of Berkeley and other places, but there was not anything like that in Santa Cruz. The next quarter (this was my third quarter in Santa Cruz), I taught a student-directed seminar with a couple of other ES students to try and develop a plan for a student housing co-op. We ended up

negotiating with the university to take over part of the Merrill [College] dorms. They had these kitchens in the dorms for people who wouldn't, or couldn't, be on the meal plan. There were these big kitchens that took up two or three dorm rooms worth of space, and people were assigned to them individually. There was nothing co-operative about it. But at that time the dorms weren't full up. They were losing money. They weren't meeting their bond service goals, because there were empty dorm rooms, so they were willing to give us a lease on twenty spaces in Merrill College, and let us take over those kitchens. So we had a self-selected twenty-person co-op in the dorms there. We called it PAD, People's Alternative Dwellings. I lived there my second year.

Farmer: But most of the students were not freshmen, right? Or would they have been?

Lipson: No, most people were not. They had been part of the student-directed seminar the previous year, or connected in some way, through friends or classes, to that. We had an amazing, communal experience. I just lived there the first year, but it lived for three or four years after then; then it spun off another one at College Five. There was a PAD at College Five [now Porter College] for another number of years.

Farmer: Was it mostly through environmental studies, or did the [Merrill College] provost have anything to do with it?

Lipson: We all had to become Merrill [College] students to live there. It wasn't strictly associated with environmental studies at all.

Farmer: Do you remember particular people that helped you in the administration, or was it really basically student-run?

Lipson: Oh, well, there was the guy at student housing who ultimately became vice chancellor for business affairs. Can't remember his name. The provost at the time was George Von der Muhll. He was very supportive. In fact, he gave us that little spot of garden next to the provost's house that sits right next to the Chadwick Garden greenhouses, so we did start to have some interaction with them. We got some starts from them. We planted our own garden there in that space, double-dug the beds, because it had just been weeds. So George let us take that over.

Anyway, co-op organizing was a major theme of my college career. I got involved with Neighborhood Food Co-op, and became president, at some point, of Neighborhood Food Co-op, and was doing that when it folded, and transformed into New Leaf.[2]

Farmer: Was that the one on the Westside?

Lipson: Yes, it was there on Ingalls Street, where Bonny Doon Winery is now, in this old warehouse space. And I got involved with some statewide co-op networks. There was a California Co-op Federation for a while. I was doing all that while I was working with Dudley Burton in environmental studies on his whole analysis of Redwood National Park. That ended up being my thesis project, the work I did on his book.

Farmer: So it sounds like your family background wasn't so much in farming as it was more in academia—

Lipson: It wasn't farming at all. Not at all.

Farmer: You're interested in policy; you're interested in politics, and organizing. When did it turn into agriculture and farming?

Lipson: Well, I did get into Molino Creek basically through the co-op window, because it was being organized as a co-operative. I landed at Molino Creek after I graduated. I was working for Jim Pepper as a research assistant. I was in his office when he got the phone call that said, "Come and check out this piece of property up here." That was actually quite early on, in '79, at the very beginning of it.

Farmer: So did you go up there together?

Lipson: Yes, we went up there that afternoon. It was during the summer, and he said, "Hey, let's go check this place out up outside of Davenport." It was pretty astonishing. But anyway, I landed up at Molino Creek. So we were starting up our farm, and that led me to CCOF.

California Certified Organic Farmers (CCOF)

We were wondering about organic certification; we knew that there was such a thing, but didn't really know anything about it. So I found CCOF and Barney Bricmont[3] somehow, and started going to a couple of meetings of the Central Coast chapter.

Farmer: Were they still having them at his house then?

Lipson: I remember a couple at his house, at least. I remember one down in Watsonville. So I started connecting to CCOF, and the statewide organization. This was '83, '84.

Farmer: It was a completely volunteer organization at that time?

Lipson: Yes. But they had just begun to tax themselves one half or one percent of sales to create the fund for—I think the original idea was for marketing, for promotion—but it also created the possibility of starting to have a paid staff, and establishing a professional office. I actually put myself forward for that position. There was a position created called executive secretary, which was a part-time deal. Barney really wanted to fade out. He was running for school board, I think. That was preoccupying him. I think it was early '85 I got hired, and we established the statewide office. We sublet a little piece of office space from what was called The Energy Center, which was related to Rich Merrill[4], but it was a spin-off from the Cabrillo [College] solar group.

Farmer: Where was it?

Lipson: It was in Pearl Alley [in downtown Santa Cruz]. It's where Bay Photo is, the backside of where Bay Photo is now. The Chi Pants factory was there, right next door. I started out with just a little desk space sublet from The Energy Center, and then we took over a different sublease upstairs from that in the same building. And then we moved to the *Good Times* building.

Farmer: The one that exists right now?

Lipson: No, no. Now it's La Bahia on Pacific Avenue.

Farmer: Yes, because there was a little earthquake in there that messed everything up. (laughter)[5]

Lipson: Exactly. We were on the third floor of that building. *Good Times*' publishing empire was housed there, and Jay Shore owned the building. So we had a small little space there. It must have been '87 when we first started renting that, because CCOF was growing, starting to get bigger—

Farmer: You were adding staff, or were you still the only staff?

Lipson: I was adding other staffers, and we had student interns. There are a couple of protégés who are now very accomplished organizers in their own right: Reggie Knox[6] and Kai Seidenberg, who are both still here in Santa Cruz but doing other things in agriculture and food systems. But CCOF was growing. There was this watermelon incident in 1985, July 4th. A bunch of people all around the country got sick from eating watermelon that had been contaminated with aldicarb, with TemikR insecticide. That was the first sort of hyper-drive accelerant to the growth of CCOF.

Farmer: So it was a food safety concern.

Lipson: A pesticide scare. In summer of '85. At that point, CCOF probably went from, eighty or ninety members around the state, maybe grew by fifty percent pretty quickly. The curve was rising. We were starting to do inspector trainings

and writing the first certification manual to kind of codify everything. Brendan Bohannan was a guy I hired [as certification coordinator], and Phil McGee [as administrative assistant], who had been working at The Energy Center. Things were cooking along and bringing in more income to the organization, new chapters forming in some places in the state. So the board made a decision to hire a full-time executive director. This would have been early '88. I put an ad in the *Sentinel*, and that very first afternoon I got a call from this guy Bob Scowcroft[7], who said, "This is my job." (laughter) And sure enough, it turned out to be his job.

Farmer: What made him think so?

Lipson: Well, he had already been involved in advocating for organic agriculture, and against pesticides. He had worked at Friends of the Earth with David Brower. Just out of college, he worked for the Alaska Coalition on the Alaska Native Claims Act, and then through that got connected to Brower and Dave Philips and those guys, and got connected to this pesticide project organizing retailers, natural foods retailers, to promote pesticide-free food. At the time that we started advertising, he was working for University Extension. He was organizing classes and being an administrative person for them, but he had had this core interest since the early eighties, so when he saw this, he knew that's what he was going to go for. And so Bob became the ED. Because I was still farming, I didn't want to be the full time ED. I was happy with my part-time position and continuing to farm at Molino Creek. He became the ED then, in '88, and I went to New Zealand to go to the—I think it was the second International

Permaculture Conference—and to do a permaculture course with Bill Mollison out on this little island off Auckland. I was in Hawaii on my way back from that trip when the Alar thing hit.[8] Maybe Scowcroft started in '87, and this was like February of '88.

Farmer: Okay, so he hadn't been there very long.

Lipson: No. He hadn't been there very long, (laughter) and things just went immediately, totally ballistic. Meryl Streep was on TV, and NRDC was all over the place. There was this big *Sixty Minutes* exposé about Alar. These things (i.e. pesticide contamination events) had been building for a few years. It just went over the top completely.

I was coming back from a very different experience in New Zealand. I mean, Mollison just completely blew my mind. I was going to quit my job and just permaculture Molino Creek. That's what I wanted to do. And that went out the window really quick when I came back to this mayhem.

Farmer: And you became your extremely busy self, which you are now.

Lipson: Kinda. I mean, the growth curve of CCOF and the media attention—you just didn't know what was going to happen next. We had a front-page article one day in the *New York Times* by the environmental writer for the *New York Times*.[9] It was this profile of CCOF, saying maybe it was the most influential alternative agriculture group in the country. We *were* the most professionalized of all the organic groups around the country. There were these grassroots, bootstrap grower-based certification groups all over the country. Now, these were all spin-

offs from Rodale, basically. That's where the genesis of all of it was, was Rodale.[10] That's how CCOF had gotten started ten years before I was involved. But CCOF was the most professionalized, and had a real office and a phone, and Bob knew how to run with this stuff, and knew what it meant to be an activist, professional organization in the spotlight. So things really started growing fast.

The [Loma Prieta] earthquake hit in fall of '89, my little post-traumatic stress moment here, (laughter) because [it was] very vivid. We were up on the third floor, and we had this back door. We came up from the parking lot that's still there on a fire escape, these metal stairs on the back wall facing towards Front Street, and that was the door into our office. When the quake happened, I got in that doorway. But there were four stories of plate-glass windows that were all exploding outward, and I was in this little cone of safety there, and this big crack opened up in the wall right next to my desk. Me, and Brian Baker, and Zea Sonnabend[11] were in the office, and I had just brought into the office this new computer, it's a 386 IBM (laughter), and you know, it's like, wow, we are really going to be so fast on this thing now, and almost literally had just gotten it all plugged in and set up when the quake hit.

Farmer: Was it okay?

Lipson: I think it still worked later on. Of course, as soon as we could, we got down into the parking lot [from] the office, and I went around the corner onto Pacific Avenue, and the department store there had collapsed. I ended up directing traffic at Front and Soquel until it got dark. For some reason that just struck me as something that needed to be done, and I stood in that intersection

directing traffic for about an hour. There was no power. There was just this huge cloud of dust in the air, and the aftershocks just kept going and going and going.

Farmer: And the smoke, and all the—

Lipson: Yes. Our building didn't collapse, but they tore it down quite quickly later on. We were able to get in there a week later for an hour, with our hardhats on and a police escort, to get as much of our stuff out as we could.

Farmer: And you have all the CCOF records to this day, right?

Lipson: I have a bunch of them. I do have a good stash of original material.

Farmer: You must have been very disciplined about getting your stuff out of the office then.

Lipson: Oh, yes, [it was] a total military operation. I mean, it's not like it was a huge office, but computers and files. We just worked out of Bob's house for a while, until we rented one of the studios at the Sash Mill.

Organic Farming Policy Work and the Organic Foods Production Act of 1990

So in the wake of the Alar episode, there started to be a lot more interest in organic. Of course, California had had a law on the books,[12] but with all the renewed interest, there was starting to be some focus on that in the ag committee of the state legislature.

Farmer: Is this when Sam Farr was in the state legislature?[13]

Lipson: Yes, Sam was in the State Assembly. There was an exotic-pest crisis with the apple maggot, and some of the organic growers up in Humboldt and Mendocino County were getting kind of militant about their rights not to be sprayed, and their economic interest in being organic. So the guy who was the chair of the Assembly agriculture committee, I can't remember his name—an established, typical state politician, big friends with big ag—started making noises about overhauling the state organic law, and it wasn't necessarily going to be a good thing. So I started making trips to Sacramento as a CCOF employee, and started working with Sam and his staff on what turned out to be a major overhaul, a complete, total overhaul of the state law, and moved part of it out of the health and safety code into the ag code. At the same time, I helped instigate the federal law. I had gone to Washington for a meeting of the National Coalition Against the Misuse of Pesticides, NCAMP (which is now called Beyond Pesticides), and was cultivating this crossover between the anti-pesticide groups and the organic farming groups.

Farmer: So people were coming from all the states to those meetings?

Lipson: Sure. NCAMP was a national group. It was centered on the people who had immune disorders from pesticide exposure, the environmental sensitives, and the hardcore anti-pesticide activists. Which didn't necessarily include farmers. (laughter) So that was just kind of one of the logical places to be connected. But while I was in Washington on that trip—again, post-Alar, a lot of media attention on this nascent organic thing—there had been a proposal floated in the U.S. Senate ag committee to create a federal standard.

Farmer: And that didn't come from California?

Lipson: No, it came from Georgia, Senator Wyche Fowler. And again, this wasn't necessarily going to be a good thing. This was not being dictated by pro-organic interests. So I made a cold call to the staff of the Senate ag committee. There was a brand-new person in that job named Kathleen Merrigan[14], and I just proceeded to tell her about organic agriculture: "You know, there're rules in a few different states, and they're all kind of different, and [we] probably need to start thinking about a national standard." So that was sort of the inception of what turned into the Organic Foods Production Act of 1990.

Farmer: But then it wasn't really implemented until 2002.

Lipson: Correct. So, I made the first snowball that turned into that avalanche, but I was mostly focused on the California state legislative process, and overhauling the state law. Those two things (federal and state laws) were moving simultaneously: a big national network of organic growers got put together to work on the federal law and the precursor of the Organic Trade Association, and a lot of the early tycoons—

Farmer: And how did those people get put together?

Lipson: Well, there were various networks that found each other. United Fresh Fruit and Vegetable, which was the big national mainstream produce promotion organization, helped convene some meetings that brought together a lot of the organic folks.

Farmer: Did that become PMA, Produce Marketing Association?

Lipson: PMA also existed at the same time. They have recently merged. After many years of trying to deal with having two organizations, they just finally, formally, officially merged a year or so ago. But anyway, there were various networks. We had a network of organic grower certification groups called OFAC, the Organic Farmers Association's Council, which grew out of WACO, [pronounced "wacko"] (laughter) which was the Western Association of Certification Organizations.

Farmer: It's a great name.

Lipson: Yes. That was CCOF and Oregon Tilth, and Washington Tilth. Because this issue of different standards really was a problem, we were trying to iron all that out, or at least connect with each other to try and figure that out.

Farmer: Did we have email by then?

Lipson: In 1990 almost nobody had email.

Farmer: So it was all being done by meetings and phone calls and traveling.

Lipson: And FAX. How did we ever get by without email and cell phones, I don't know. (laughter) Actually, I had a cell phone in '89 because Molino Creek's off the grid. There are no phone lines into it. We had been on the two-way marine radio phones for some years, but that system was disappearing, so we had one of the very early briefcase-sized cell phones. Three watts. Man, it's amazing, the amount of power. So during the earthquake at Molino Creek, we

had power, we had water, we had a phone. It was the peak of tomato harvest, so we hardly missed a beat on the farm. And meanwhile, Santa Cruz was in an awful state. God, it was awful. Anyway.

Farmer: So we are in Washington, D.C.—

Lipson: So simultaneously, the overhaul of the California law, and creating an enforcement program in California was moving parallel to establishing a federal standard and a regulatory mechanism at the federal level—

Farmer: But wouldn't you say that California, the farmers, basically the people that started CCOF, were into regulating themselves, and enforcing the rules on their members, before there was ever federal enforcement of anything?

Lipson: Yes. But see, the thing that really sparked the issue in California was fraud: the "carrot caper." This is what really kicked it into gear: these people were selling organic carrots that basically were fraudulent, but there was no way to deal with it. The retailers said, "Certified? Uh, no, they just told me it was organic, so I labeled it organic." The distributors were like, "Yes, I need some organic. Go ahead, call it organic!" There wasn't even a basic acceptance of third-party certification as a baseline requirement for the marketplace.

Farmer: But the demand created a higher price, so there was a reason.

Lipson: Right. Yes, so there was a very attractive incentive for fraud. We (CCOF) made a deal out of one of these cases in the media. The *San Jose Mercury News* ran with the story.[15] The basic objective became to create an enforcement program, to

create an assessment collected by the Department of Agriculture and the county commissioners, and have a registration program. The board of CCOF didn't feel like it was right to impose a requirement for certification. They wanted that to be their additional level of value in the marketplace. But they said, "There needs to be some kind of legal baseline, so we'll create this registration program where everybody has to basically declare that they're following the law and make a legal affidavit that they're following the standards in the law. But then, third-party certification will be over and above that." That was the point of view of the CCOF leadership. Meanwhile, the federal law was being written to require third-party certification. But of course, that took over a decade to actually come into force. But the California legislation itself was a very epic process. This was at the time of— I mean, there's Alar and the cyanide in the grapes at the same time, and Proposition 65 had recently passed. So pollutants in the environment and contamination and carcinogens were [a] big issue, and the follow-up to Proposition 65 was this huge, comprehensive, totally game-changing proposition called Big Green [Proposition 128 of 1990]. I don't know if you remember that.

Farmer: I don't know too much about that.

Lipson: It would have gone much further even than Proposition 65, and really directly affected agriculture. So a lot of mainstream agriculture was looking at all this saying, hey, in a few more years, we're not going to have *any* chemicals, and everybody's going to have to be organic. So everybody became intensely interested in Sacramento in this bill that Sam Farr was moving along to upgrade the organic statute and create a regulatory program. We started having these

meetings with *thirty* people, and all the major ag organizations, and their lobbyists, and their mother's lobbyist, (laughter) and you name it! And five or six different state agencies would be sending people, and it was quite a tizzy. That confluence of what had happened with Alar and other stuff in the food supply, and the overall environmental battles going on, really intensified it all of a sudden. This was all going on around the time of the earthquake. Our office had been destroyed; I was working out of our attorney's office in San Francisco. We had hired this environmental attorney in San Francisco (Barry Epstein), who did a lot of work in Sacramento, so I was working out of his office in midtown San Francisco, and every time the bus went by, the whole building would vibrate. I was in post-traumatic shock. It was very nerve-wracking. And I'd be driving up to Sacramento. Of course, the Bay Bridge was out, so I had to go up over the San Rafael Bridge, or down to the San Mateo Bridge, so I was just driving around the state all over the place. I spent nights on the couch in Sam Farr's office in Sacramento. It was all very, very intense. But we got both of those bills passed, and then went into a whole new phase.

Farmer: So when it took shape in California, you stayed on as part-time staff at CCOF for a while—

Lipson: Yes.

Organic Farming Research Foundation

Farmer: But then you transitioned to the Organic Farming Research Foundation (OFRF), right, or created it?

Lipson: OFRF was created *by* CCOF in 1990. It was Mark Nielson and Warren Weber, Steve Moore. It was very clear the universities weren't helping on organic, and the growers' attitude was, well, we're just going to have to do this ourselves.[16]

Farmer: So that was a way to apply for grants for research, OFRF?

Lipson: It was created as a vehicle for funding research. CCOF was a [501](c)5, was a trade association, so it wasn't ideal for foundations to give money to. So we created a (c)3, and called it Organic Farming Research Foundation, to raise money, and then to give it back out for on-farm research.

Farmer: So you wanted to work directly with the farmers.

Lipson: That was Mark Nielsen's inspired idea.

Farmer: And where's he from?

Lipson: He is a kiwi farmer in Gridley, up outside of Chico, still there. Great guy.

Farmer: And is he participating personally in the research, and working with science?

Lipson: He was very interested in it, yes. Not particularly a scientist himself.

Farmer: Were there supposed to be collaborations, like using the farms to do experiments that scientists and universities wanted to do?

Lipson: Well, the idea was not based in any assumptions about the universities. It was: we're going to fund farmers to do the research and share it with each other. Now, that assumption proved to be kind of problematic, and over time the experience of OFRF has been that it's very difficult for farmers to do that reliably, to have a rigid experimental protocol that will actually produce results where you can say: yes, the data shows this. Not to mention the difficulty of getting them to actually write the reports once they've gotten the money and done the experiment.

Farmer: Because they're farming, right?

Lipson: Yes. The idea of farmer-scientists still has a long way to go. But very quickly, the alliance of scientists with farmers to do experimental work on farms, that was validated.

But anyway, OFRF was created as a spin-off from CCOF in '91; I helped write the original mission and goals statement for OFRF as part of my job at CCOF, and then it had this life of its own on the side there after it got started. But I quit CCOF in '93 to farm full time and build a house on the farm. So I had a hiatus there in between CCOF and OFRF. In the meantime, OFRF decided it was going to hire its own executive director. It was pulling itself away from CCOF and becoming a national organization in its own right. So Bob [Scowcroft] decided to quit as director of CCOF and become the director of OFRF.

Farmer: And was it a national organization at that time, or was it mostly based in California?

Lipson: Well, the initial board was mostly based in California, but not strictly. It was starting to pull in people from the Northwest and some other places. There was an intention on the part of that board to make itself into a national entity. Then there were some growing pains with CCOF around that. But in trying to grow OFRF, there was interest from some of the funders in public policy related to research. Policy work wasn't really one of the purposes that OFRF was formed for, although it was within the scope of its mission. But Bob and the board were seeing interest in this from some of the foundations that they were querying about funding, getting funding from. So we decided to put together a proposal that would fund me to become a part-time staffer for OFRF to examine federal research portfolios.

"Searching for the 'O–Word'"

Farmer: Is that how you got the "Searching for the 'O- Word" done?[17]

Lipson: Yes. We got funded by the C. S. Mott Fund to do this analysis of [the] United States Department of Agriculture [USDA] organic research portfolio. The database of USDA-funded research had just very recently been made available over the Internet.

Farmer: In the mid-nineties.

Lipson: Yes, this was like '95, '96. So I started doodling around with that. It was a brand-new tool. I remember just sort of assuming that I would be able to do that, and sure enough, it was there.

Farmer: And you could do it from here, instead of being in Washington, D.C. looking through the files.

Lipson: You could just get online and look at all the files. It had a very elaborate search function. There wasn't a lot of experience that anybody had with using online access to do that sort of thing, although it was not brand new. You'd been able to do stuff like that in the universities—

Farmer: In libraries.

Lipson: Yes. For some number of years. But as a sort of a[n] activist NGO kind of policy analysis, it was very fresh. So that turned out to be a very handy platform for advocating for more federal, or for any federal resources [for organic research], because there really were none intentionally directed that way. There were a handful of things scattered here and there, various university projects and USDA-funded research. It was projects that were funded with federal money through USDA to the universities and the ag experiment stations.

Farmer: So federal tax-supported—

Lipson: Right, yeah.

Farmer: I was reading the "Searching for the 'O–Word'" introduction this morning, and it said your goal was to have it serve as a benchmark.

Lipson: Yes.

Farmer: So I was going to ask, has it done that?

Lipson: Sure. I'm all wrapped up in the farm bill right now, and a couple weeks ago we got, in the first markup, the first actual drafting of official language at the subcommittee level. There's an authorization for funding of twenty-five million a year for organic research and extension.

Farmer: Fantastic.

Lipson: And that's the biggest commitment organic's ever had—for anything!

Farmer: What was it before, nothing?

Lipson: No, since the last farm bill we've been getting about five million a year in that program.

Farmer: So twenty-five million.

Lipson: Yes. It's not hard money. It would still have to be appropriated legislatively each year.

Farmer: Sam Farr's on the appropriation committee.

Lipson: Sam Farr is on ag appropriations, so it helps.

Farmer: This is Ellen Farmer, and I'm with Mark Lipson on Saturday, August 25th, 2007. This is the second interview, and we're in Santa Cruz. So, Mark, the last thing we talked about was developing this report called "Searching for the 'O-Word.'" Do you want to talk about how you got started with this?

Lipson: Yes, okay. Well, after the Organic Farming Research Foundation got started, I quit working at CCOF [California Certified Organic Farmers] in early '93, I think, and then was just farming. In '94 I built my house at Molino [Creek Farms]. While I was doing that, Bob Scowcroft had moved over to OFRF from CCOF, so that the spin-off of the foundation from CCOF had been completed. Some of the first board members of the foundation and some of the other funders that Bob was talking to were interested in policy. There was a perception that, well, that's an area that nobody's working on in the aftermath of the Organic Foods Production Act in 1990 and the overhaul of the state law. There wasn't really much of a follow-up happening in the policy arena.

OFRF was getting started on its grant-making program but with these very modest amounts of money. We were having different discussions about what kind of projects OFRF might pursue, or get funding for. In those conversations, we recognized that no matter how successful OFRF is going to be, with its model of trying to raise money from different places and give it away for research, we're never going to approach the scale that the federal government is doing in terms of spending money on agricultural research. I'm not sure exactly where the first germ came from, but we basically said, "Well, let's see if we can figure out what research is being done on organic, document whether or not there is any public resources going into organic research. So Ed Miller from the C.S. Mott Fund, I remember he and Bob came up to the farm while I was working on the house, and we had a meeting there and focused the idea more on trying to do this analysis of the federal research portfolio. Ed funded us to do that, and so I

started working for OFRF part time on that. I guess that would have been at the very end of '94, beginning of '95.

Farmer: Was it just you working on it?

Lipson: At the foundation?

Farmer: Yes.

Lipson: Bob was the executive director. You know, Bob had become the first— Well, actually Erica Walz was the first employee while Bob was still at CCOF. Bob hired Erica to do the sort of administrative, clerical work for the foundation. She still is on the staff of the foundation. She lives in Utah and does our publications stuff by remote from there.

So it was early '95 when I started investigating how to analyze the federal portfolio. Of course, there had been this system established for some time called the Current Research Information System, CRIS, which was one of several federal research databases. But it was only a couple of years old at that point that you could access that over the Internet. It was very early Internet. But that's what I started doing. It had a very elaborate search function, but we very quickly realized that just searching on "organic" wasn't going to turn anything up because of the phenomenon of—you know, its sort of being in the closet. A good chunk of the introduction to "Searching for the 'O-Word'" is about the taboo, which was very tangible. We recognized that some of the researchers might be pursuing organic objectives or working in an organic system but not calling it that. So we ended up using about a hundred different search terms to start

narrowing down the analysis. The CRIS database at that time—I don't know what it had, 40,000 or some tens of thousands of federally funded agricultural research projects in it. So we developed this list of keywords: integrated pest management, cover crops, rotations—I mean, every different aspect of organic that you could find a word for. Then we started reviewing the projects one by one. This was basically just me with, for some parts of it, some interns.

Farmer: So how did you get ahold of things? They didn't publish them on the Internet, did they? Like, the actual text of the—

Lipson: You could get the CRIS report form, which had the [research study's] objectives and what they call the approach—the hypothesis and methodology, and progress reports. The search would turn up a link with the project title and code number and principal investigator. Then you could go to the record, and it had this summary information about the project.

Farmer: So you could do that from here, from California.

Lipson: Yes, yes. We had our 28k modem, dial-up lines. (laughter) I think we had an AOL account to start with, before there were other ISPs [Internet service providers]. I guess I just sort of took it for granted that you'd be able to do that. We didn't quite realize at the time how unprecedented it was to be able to do that.

Farmer: To not have to actually go to a library and get the materials.

Lipson: Yes. I mean, it would have really been unthinkable otherwise, to try and do this. So that was basically how it came together. We got an advisory group together of a couple of key people from around the country: George [W.] Bird from Michigan State, who had been at the national director level for the USDA SARE [Sustainable Agriculture Research and Education] program, which was then about six or seven years old— he had been doing a similar kind of analysis of the federal research portfolio for sustainability. Because "organic" was totally taboo, "sustainable" had kind of become the word of contention. "Organic" just was off the screen in the academic sphere. Sustainable was safer, but therefore subject to reification and a lot of "eye of the beholder" interpretation. Everybody wanted to claim that they were doing sustainable agriculture research. George had a contract from the USDA to analyze for them what was sustainable. So he was running these panels all over the country, these expert review panels, to evaluate research projects.

Farmer: Did they have the regions at that time, the SARE regions?

Lipson: Yes. The SARE regions were defined.

Farmer: Was OFRF already a national organization at that time?

Lipson: It was trying to be. That was the intention. But having been rooted in CCOF, and almost all of the founding board members being from California, it was only gradually widening out its scope.

Farmer: So this was a way, actually, for you to contact other people and begin to do that.

Lipson: Certainly, yes. It was working on a national profile level right away. So, George Bird. Molly Anderson was another key person, who at that time was running the ag food and nutrition program at Tufts University, with Willie Lockeretz, who's another very key person. Garth Youngberg, who had by then started the Wallace Institute in Washington.

So anyway, we started plowing through it all. We started classifying stuff that we could attribute somehow (chuckles) to being related to organic, or pertinent. That was the key term that I tried to focus on, was— Not just related, because everything's related, can be in some way. That wasn't a good enough screen. So I tried to develop more focused criteria, being *pertinent* to organic. We found ten projects that qualified. We classified projects as "strong organic" or "weak organic" or "neutral" or "non-organic." So that whole piece of analysis, then, I really wanted it to be packaged within this narrative of making the case of what organic is. Of course, at that point the certification, identity thing had been very well established in California. But the process of implementing the federal law and writing the national rule was stuck in first gear. It ultimately took them until 2002 to finish it.

Farmer: The NOSB [National Organic Standards Board] had been established?

Lipson: Yes, the first NOSB had been appointed in '92. So there was a lot churning at that point.

Farmer: And this was a USDA under [President] Bill Clinton. Did they have a lot of new people, or was it the same players—you know, the bureaucrat types?

Lipson: There was new leadership. Some of the bureaucracy was the same. But agriculture is not as partisan as other areas. Dan Glickman was the secretary of agriculture—well, actually it was Mike Espy before Glickman. Espy went down in flames on corruption charges. But big agriculture still dominated USDA. It didn't matter who the president was. But we prided ourselves on being non-confrontational and pro-farmer. That had always been our modus operandi at CCOF, and we carried that through into OFRF. So we found people to work with within USDA who were helping us with the data and eventually helped us with the funding, the amounts of money that pertained to specific projects, which was not something that was accessible through the CRIS system. In order to get a handle on the money that the organic projects represented and what the total expenditures were, we got help from inside the system.

So where was I going? The theory of organic certification and the dominant feature of the National List—what was an okay input and what wasn't, and the natural-synthetic boundary—within the scientific community, that didn't have a lot of credibility. It was just sort of, well, that's just arbitrary; what's the point? And you could explain to them that, well, the point is that that's a consumer-based definition for purposes of the marketplace.

Farmer: Yes, labeling.

Lipson: I had a lot of those arguments, or a lot of those kinds of discussions. So in couching our analysis of the research portfolio, I tried to make this distinction between "big-'O' Organic" and "little-'o' organic"—capital 'O' being the formal, legalistic, certified definition; small 'o' being essentially the ecological agronomy

basis of organic, which are not the same things. From a scientific and research point of view, the point was to investigate the little 'o' organic, but it had to be within the boundaries of the big 'O' Organic. That defined the universe. But within that, the point was what's happening biologically and ecologically and economically within these systems.

That whole part of it was as big a challenge as doing the analysis of the research portfolio itself, trying to do that synthesis of: What does organic really mean, and what was its intellectual history within the research community? We felt it was really important to make that case about the taboo because this was the first assessment that had been done since 1980, when Garth Youngberg and Dick Harwood did the USDA report.[18] And pretty much as soon as they were done with it, [President Ronald] Reagan came in and fired them, and organic was *desaparecido*. The taboo became enforced with a vengeance.

Farmer: Because it was confronting big agriculture.

Lipson: Yes.

Farmer: And did anybody at the time say, "Well, if people start buying into organic, why would they ever look at conventional again?" Was big agriculture afraid they were going to lose consumers altogether when they realized what was going into their food?

Lipson: I don't think consumers really were part of the picture. It was more about pesticides.

Farmer: And being able to sell them?

Lipson: Yes. And the struggle over regulating them. And organic would define an endpoint that would pull everything towards it. The economic argument about pesticides was they're just necessary. You can't "feed the world" without them. I mean, the vilification of organic and of the scientists who wanted to study it was really severe.

Farmer: So people couldn't get grants.

Lipson: You couldn't get grants. You couldn't pursue a career!

Farmer: You had people report that to you.

Lipson: Sure.

Farmer: Anonymously?

Lipson: Semi—

Farmer: Yes.

Lipson: And the people that could do it were the safe ones. They had tenure, or had some other kind of support, or just didn't care. But lots of them did really take it on the chin. There was just—so much contention over that.

Anyway, we felt that recapitulating that and filling in the story since 1980 was a really important part of making this case about why more public resources should be devoted to organic research. The study proved to be a much more

effective platform for policy advocacy than we really had any idea that it would be.

Farmer: Basically because it told the story, told the truth.

Lipson: Yes, and it had some hard data. It put some real analysis into something that was otherwise just anecdotal. And it coincided with the first proposed rule for the National Organic Program, which, again, was very much caught up with the early Internet phenomenon. When that rule was published, it was one of the first rules that you could comment on electronically. It received more comments, over a quarter million, which was an order of magnitude more than anything USDA had ever done, and the second-most that anything in the federal government ever had received in terms of public comment. The only other thing that got more was the FDA's attempt to regulate tobacco as a drug. This is just absolutely astonishing, this seismic event that wasn't even necessarily appreciated by our community, but within the government was recognized as something really, truly astonishing.

Farmer: People *are* out there.

Lipson: Yes.

Farmer: Do you think it was networks that had been established because people were getting on e-mail, and through CCOF and places like that?

Lipson: Yes, it was a whole bunch of things. We had a really effective national coalition. The movement had grown— There were organizations all over the

country. The thing got a life of its own. And the market was really growing. There was a critical threshold of legitimacy, or realness, concreteness about organic that—it really can be done. It's not just a hypothetical or a pipe dream; it's really happening. By then, people had been doing it for ten years, and were growing and economically viable. Some scientific stuff was starting to accumulate, and always ever more stuff about the dangers of pesticides and synthetic fertilizers. All those things contributed to this intense interest in it. There's no question in my mind that that was the first exercise of the new muscle tissue of what we look at today as this massive movement for food and local food and interest in it. The whole Alice Waters, Wolfgang Puck nouveau American cuisine thing had also added to that.

But anyway, the coincidence of "Searching for the 'O-Word'" with that political response to the first proposed organic rule immediately helped the "O-Word" document get a lot of attention. People were slapped upside the head in Washington, saying, "Organic? What's organic? And what are we gonna do about it?" (laughs) And so behind that shock wave, the "O-word" was there. It's not like they were reading thousands of copies of it everywhere, but—

Farmer: How did you make it available? Websites were barely available then.

Lipson: OFRF did not have a website at that point. We got requests through the mail, and we sent it to all the key administrators in USDA, and the deans, and extension directors, and experiment station directors at all the land grant universities, through the SARE network and the Sustainable Agriculture network [SAN].[19] And Congress. We gave it to people in Congress.

Farmer: Great.

Lipson: And so [California Congressmember] Sam Farr, who was not brand-new to Congress but pretty recent, introduced a provision into the research title of—it was the 1997 farm bill, except they did the research title separately a year later. It was actually the 1998 Agricultural Research, Extension and Education Reform Act [AREERA]. They booted the research title an extra year at that time, but Sam established this unfunded provision for an organic research program. It didn't get any funding until 2001.

Farmer: But the name "organic" ended up in the legislation?

Lipson: Yes, the Organic Research and Extension Initiative was established, and at the same time, over on the Senate side, in the report language for the Senate version of that bill, they specifically took notice of "Searching for the 'O-Word,'" and recognized the need for there to be more organic research, as documented by the Organic Farming Research Foundation.

Farmer: Had you testified yet at that time there?

Lipson: No.

Farmer: Sam Farr talked [in his oral history] about you testifying in Sacramento.[20]

Lipson: Yes, Sam loves that story. (laughter) He does love to tell that story.

Farmer: Could you just say what it was about the [federal] rule, or the first language, that got people so upset that they wrote all those letters?

Lipson: Well, the big three were "genetic engineering," "sewage sludge" and "irradiation."

Farmer: That's what people were protesting.

Lipson: The rule appeared to leave it open that those could be allowed under the organic label.

Farmer: And had that ever been the intention of the organic community?

Lipson: Certainly not. Some of the people writing the rule on the inside of USDA, who were some of the stellar early movement pioneers—Grace Gershuny in particular—have always argued strenuously that that was a misinterpretation of what they wrote. Nonetheless, that rule was almost universally perceived as a very extreme watering down of what organic would mean: essentially emasculation of the standard. And by God, people cared about it. And because it lent itself to those three talking points in particular, it really got everybody well riled up.

Farmer: Were you ever on the NOSB committee?

Lipson: No, I think I applied for the very first round of the NOSB, but that first round was appointed by the [President George H.W.] Bush administration. So you had to have some Republican credentials, and I didn't have any. (laughter) Plus, organic had some big producers in California, so they were more appropriate, really, and then so geographically there wasn't really room for more California. Which is really—God, it's just as well. Things would have been

different if I had been on the NOSB. A lot of other things wouldn't have gotten done.

Farmer: Yes, exactly. So what were you doing while the NOSB was starting to meet and work on changing the rule so it was acceptable?

Lipson: In the early nineties I was focused on the state organic program.

Farmer: [But after] 1997 and the "O-Word" had come out.

Lipson: Well, once the "O-Word" came out, then we really started to realize, okay, we need to pursue leveraging this analysis and really use it as a platform for policy advocacy. So that was one particular focus.

Scientific Congress on Organic Agricultural Research (SCOAR)

The next logical corollary of the "O-Word" in the academic arena was to compile a research agenda. We had identified a least a couple of handfuls of researchers who were doing organic, and we knew there were more out there who would like to but hadn't gotten funding to do it. And we had a bunch of farmers who were really interested in research. So let's get them together. The initial idea was to pursue creating a national research agenda that would be the product of a collaborative dialogue between scientists and farmers.

Farmer: And OFRF was leading that relationship?

Lipson: Yes, we created what we called the SCOAR project, Scientific Congress on Organic Agricultural Research. That got off the ground very slowly; we didn't

have any money to do it. And then a grant did get put together that got some federal money from what was called IFAFS, the Initiative for Future Agriculture and Food Systems, which was this big new competitive grants program that came out of the '98 research title. One of the things we were doing in our relationship building with the agency, with USDA, was we got the word "organic" put into the request for proposals for that program.

Farmer: So they all had to say that, or it was just acceptable?

Lipson: It was acceptable. It wasn't required, by any means. But it was acceptable. And this was kind of the baby steps that we were taking. So within CSREES [Cooperative State Research, Education, and Extension Service], which is the competitive grants part of the USDA, we said, "Okay, just make it safe for somebody to say, 'I'm studying organic' and still qualify for this."

Farmer: So this is just administrative language. It's not legislation that has to be passed.

Lipson: Correct.

Farmer: But you started being able to affect that language.

Lipson: Yes. And within ARS, the Ag[ricultural] Research Service, which is USDA's in-house research component, we were also cultivating there. Although, in fact, their second-in-command administrator called me up out of the blue, had seen the "O-Word" report somewhere—I'm not sure exactly where. Darwin Murrell was his name. He was the associate administrator for ARS. He called me

up, said, "I'm going to be in Sacramento for a meeting. Can you drive up there and talk to me about this? Because this is something that ARS has to do." So he got the ball rolling, and subsequently asked me to come back to D.C. and make a presentation to the national program leaders there.

There was another really, really crucial thing. Rich Rominger was the deputy secretary of agriculture under Dan Glickman.

Farmer: From California.

Lipson: From California.

Farmer: But you were talking federal now.

Lipson: Yes, he was second in command at USDA. I think it was actually before we published the "O-Word." Through Barbara Meister—has her name come up?

Farmer: No.

Lipson: Barbara [A.] Meister, who lives in Santa Cruz now (but not working professionally in sustainable ag anymore), she was special assistant to the Undersecretary for Research [Education and Economics], who was Karl Stauber. We had connected with Barb through Kathleen Merrigan, I guess. Barb set up this meeting for Rominger, and several of the undersecretaries, and some other people at a pretty high level in the USDA, for me and Bob to make a presentation about organic research. So we ramped up to that stratospheric level pretty quickly. That was probably late '96 or very beginning of '97. We were presenting the unpublished data from "Searching for the 'O-Word.'"

Farmer: And answering questions.

Lipson: Yes. And making this case, and trying to overcome the taboo and make the world safe for organic research.

Farmer: Yes. (laughter)

Lipson: Subsequently—I'm not sure if it was the next budget cycle or the one after that—Clinton's budget proposal had funding for organic research.

Farmer: Do you know how much it was at that time?

Lipson: I think $2.1 million, was what they put in their budget proposal. They called it the Organic Transitions Research Program. It wasn't exactly done under the same authorization as Sam had authored, but fiscal year '01 was the first year that had funding. At that point we went from having some piecemeal stuff on soft money within ARS, and a project here and a project there under other competitive grant programs—that was the first money specifically dedicated to organic research, where the requests for proposals actually required that it be in an organic system.

And then—well, in 2000—you were asking what else was I doing.

Farmer: Yes.

Lipson: We'd started the SCOAR [Scientific Congress on Organic Agricultural Research] project. That was ramping up and we were doing national meetings. We did a series of national meetings, or semi-regional, but with a national invite

for farmers and scientists to come together and work on: what are the research needs? What are the problems? How can we produce a collaborative agenda? We didn't realize how difficult that was going to be, overcoming the language barriers and the different methods of discourse, if you will, that academics have versus what farmers have. It's very easy for them to talk past each other, for the farmers just to sit there and listen, and not be able to match the verbal dexterity of your average academic.

Farmer: That could have made things a little tense sometimes, I suppose.

Lipson: It did. Yes, it did.

Farmer: Or they lost interest or something like that.

Lipson: Right. And most of the academics are still coming from a pretty reductionist point of view, and the farmers are the ones who were way out front in terms of the whole-system perspective. That, intellectually, has been the challenge all along, and still is.

But right after the first big meeting that we had, I got my cancer diagnosis. This was early 2001. So I had to drop what I was doing, and had surgery and then radiation. That was all through the spring and into summer of 2001. I came back to work in the summer of '01 with the prognosis that I was basically cured, ninety-eight percent cured. It proved not to be the case, but it wasn't until early 2002 that that became apparent. So we were continuing with the SCOAR project. We did another major meeting. The first one had been at Asilomar. That was January of '01.

Farmer: Oh, attached to Eco-Farm?

Lipson: Yes, it was a pre-conference thing, which was great. It was really a fairly historic meeting. But so much of the momentum evaporated when I just had to drop what I was doing. There wasn't really anybody else to pick it up. Then we ramped up and did another major meeting in November in South Carolina. We were just convening our steering committee that next winter at Asilomar, that next January. We had our steering committee meeting, and I was pretty sick, but hadn't really identified that as a recurrence yet. But very shortly after that was in a real acute crisis, and started doing chemo, and that went all the way through 2002, doing successive—it resisted the first rounds of chemo and had to keep escalating the treatment.

Farmer: That must have knocked you out, then.

Lipson: Almost knocked me all the way out, yes. I ended up doing a stem cell replacement with high-dose chemo at the end of '02.

Farmer: Was that an experimental treatment?

Lipson: No, it wasn't really experimental. It had been around for about ten years by then. But it's very extreme. They give you a heavy enough dose of chemotherapy that hopefully kills the cancer, but also incidentally wipes out your immune system. What they had figured out to do was that they could take the progenitor white cells out of your bloodstream, which are the first cells that come out of your bone marrow and then differentiate into all the other kinds of white cells. So they can filter those out of your bloodstream, and then after your

bone marrow is destroyed, they put them back into your blood. They migrate to the bone marrow and reboot your immune system. Pretty wild, but it was a month in the bone marrow transplant ward at UCSF, a very tightly controlled floor.

So the SCOAR thing kind of limped along with some of the other OFRF staff, but didn't really go very far. Actually, we just this summer have finally published the end product of that whole SCOAR project, the National Organic Research Agenda.[21] So there's a new follow-up to the "O-Word" that we just published.

Farmer: And was that in time for the farm bill of 2007, for the debates?

Lipson: Well, we're using it right now, yes. It's basically, "This is what we want to spend the money on." (laughs) "We need a couple hundred million dollars of research funding, and here's the agenda. Here's the work that we think needs to be done," and it's very necessary to have that in order to successfully make the case for that kind of money. NORA, we call it, the National Organic Research Agenda.

So we're skipping around a little bit. In between my first diagnosis and recovery before my recurrence, work had started on the 2002 farm bill, and we had put together some initial recommendations for a package of $50 million a year in funding for organic research.

Farmer: Is this to be administered by the USDA?

Lipson: Yes, this package of programs. But this was the next big thrust for our policy work. We had generated a two-page summary of that in the summer of 2001, and had provided that to [Iowa Senator Tom] Harkin and [Vermont Senator Patrick] Leahy, and [Representative] Sam Farr, and some other people. So that got taken up, not verbatim, but it helped provoke proposals by Leahy and Harkin that ended up creating mandatory funding for the Organic Research and Extension Initiative. So we came out of the 2002 farm bill with $3 million a year for that program, which got combined with this other funding stream that Glickman had started, and Rominger. So for the last five years we've had about $4.8 [million], $4.9 million a year.

Farmer: Now, is this something that OFRF can apply for to distribute, or how does that work?

Lipson: No, it's a competitive grant managed by USDA. They put out their request for proposals, and review them, and make the grant awards. OFRF has had its own grant-making program, very modest. We raise the funds, and we give them back out. That's the way it started doing in 1990, and has always been kind of the central identity. Most of the time, I haven't been directly involved in that. I'm doing the policy and cultivating the land grants, and the institutional development, but am not really involved in our actual grant-making program.

The 2007 Farm Bill

Farmer: Since we're on this topic, can you talk about the trajectory, then? How do you feel it's going for the 2007 farm bill?

Lipson: I think it's going pretty well, given how screwed up the overall landscape is in agricultural policy. I mean, it's a *big* mess. This farm bill has more people more interested than any other farm bill ever has. But that has not translated into the level of change that many people expected or hoped for. The whole biofuel, ethanol energy thing is this whole *other* level of distortion on top of multiple layers of contradictory policy and boondoggle—

Farmer: And the subsidies are a big deal out there.

Lipson: Yes. So amidst all this chaos— Research is very lower-tier profile, and organic research within that is a real stepchild. Nonetheless, we got not a trivial increase in the House bill. And we got the authorization for a lot of money, but we'd have to get it out of the appropriations cycle each year. What ended up in the House bill was a mandatory five million a year. So that's there unless the appropriators take it away, which they can do. And an authorization for twenty-five million a year on top of that, but the appropriators actually have to put that in, or some part of that, or all of it, or none of it. So theoretically, under the House bill, there could be thirty million a year for that program, but it's extremely difficult to translate that into actual appropriation. So all we really have for sure is five million a year, which is only up from three million a year now.

Organic made very important gains in other areas, and we are very optimistic that on the Senate side we'll do real well on the research funding, so that if and when it comes to conference, we'll end up with hopefully in the neighborhood of $15 million a year mandatory money.

We're also trying to get a piece, or at least be specifically included in the huge new specialty-crops research fund, which is the big new thing on the scene in the research title. So we're pursuing a multi-level strategy of core, dedicated organic stuff, but also infiltrating all these other programs, and making the case that organic serves all these other goals, not just its own. So if your research priority is nutrition, yes, you should be doing something on organic. If your research priority is community development, then, yes, organic's got some positives.

OFRF has also been focused on grassroots farmer networking in order to have an impact on the farm bill, and that's going quite well. The political advantage that organic can have is that: red state, blue state, it's everywhere—all different kinds of agriculture. So if we're able to mobilize our community all over the country, we can create this consensus around organic that, yes, everybody wants it. It's a win, win, win, win, win.

Farmer: Are you seeing a lot of new farmers coming in?

Lipson: Well, no, that's actually the essential policy problem right now, is that the growth of domestic production of organic is not anywhere near what the growth in demand is. The market keeps growing by twenty percent a year, sales of organic in the U.S. just keep charging ahead. But that is not translating into conversion of land to organic and conversion of farmers to organic.

Farmer: Why do you think that is?

Lipson: It's a very complex picture. It's different in different regions of the country, and it's different for different types of agriculture, the obstacles. But we

think the number-one limiting factor is lack of information—lack of both specific research results in how to build organic systems, and a lack of the extension and training capacity to help farmers actually access whatever information there is. So both parts of the process, both the substance and transmission just aren't there. It's just within the last few years that research has actually started to get in the pipeline.

Farmer: So if the research is taking place, there might be more opportunities for trainings or conferences or meetings where they can—

Lipson: Well, I'm saying both those things have to happen. You both have to have the research, *and* you have to have a specific capacity to utilize and transmit that research. And neither of those are very robust. They're still in their infancy. While the market is charging ahead, there are still these just little tiny baby steps happening in the research and extension system. So that's the basis of our argument for—we need to seriously ramp this up. Or else, this market and all its benefits—they're going to accrue to producers in Argentina and Mexico and China. We're having some success with that.

Farmer: Because of that argument?

Lipson: Yes. And there are new proposals specifically to assist organic conversion.

Farmer: From conventional?

Lipson: Yes. It's like, "Let's create a program that'll have some money to provide both financial incentives and technical assistance."

Farmer: So it's not a subsidy.

Lipson: It's financial incentives. Financial assistance.

Farmer: Because they'll say, "I can't go organic because I can't afford to. I can't stop for three years even with part of my land."

Lipson: Right. That's the basic argument.

Farmer: And the three years wasn't arbitrary, right? It was really determined that that's what was needed for the land to rest?

Lipson: No. Well—[Pause.] Well, it's some of both. It's somewhat arbitrary. Not totally, but not a hard-and-fast scientific conclusion. You couldn't say that everywhere. And what's the goal? That's not well enough defined, saying, "Oh, your biological system has to be doing this, and your nutrient balance has to be this." I mean, the science isn't there to say that in the first place, and you couldn't say it universally for everywhere. Three years was something that the organic community could feel comfortable with. It jived with people's experience, to a large degree. But it also had a consumer respect factor, or believability factor—that if you're going to have a special label for this and charge more money for it, that was a significant enough amount of time to say that a really fundamental change had happened that lived up to this separate label and the higher value.

That's a big, long question in and of itself. There's also the factor of the farmer making the transition in their head.

Farmer: Because it's a different work style, right?

Lipson: For most farmers, yes. It's much more management intensive. You're not relying on those chemicals; you have to figure out other ways of doing things. That's the whole thing about organic and why the science of it is different. It's about management of the system; it's not about just providing these inputs.

Farmer: Yes, and a holistic management.

Lipson: That's the ideal. But nobody knows how to quantify that. The science that is relevant to that is minuscule at best.

Farmer: So the research becomes really important.

Lipson: Yes. And it's not just the quantity of research, but the quality of it. If it was really followed to its logical extensions, it would be a real revolution in applied ecological management. But the institutions are very poorly equipped to do that. The baby steps have begun. In some places it's even out of first gear into second. But there's a very strong tendency to do business as usual and to do the same kinds of things that research has been doing, except with an organic label and with organic materials.

Farmer: Is that the market? Is it that the distribution and trying to actually get stuff sold isn't changing?

Lipson: That's a different trajectory, with some similar issues—recapitulating the pitfalls of the conventional system. And in both cases, it's partly that's the way the economics are wired, and it's also partly lack of imagination about how to do it differently. It needs to be nurtured and reinforced.

Farmer: Yes. I had a question about how the USDA enforces strict standards on organic and not on conventional.

Lipson: USDA has other kinds of enforcement and standardization things that they enforce. I mean, you name it in meat and citrus. There are some health and safety components and there're others that are just purely market.

Farmer: Grading.

Lipson: Yes. Which serve some parts of the industry and not others of any given industry. But the organic law and the regulatory program that implements it are unique—very, very different from everything else USDA does—and it's still just learning how to do it. It's kind of round-peg, square-hole sort of things. We realize that just because we could, or just because we did pass a law, doesn't mean that on the ground it's going to look like what we thought it was going to look like. So USDA is very slowly, and on a shoestring budget, attempting to implement this kind of holistic, very complex standard that applies to every different kind of crop in every region in the country. Now, every other program that they've got, pretty much is for one crop, or one class of crops, or it's really mostly located in one part of the country. And organic is so diverse and has such a range of different types of systems in it, it's just very, very different. That

nature of it produces many, many corollary problems that are still being stumbled over.

Farmer: With your background with CCOF and so forth, did you anticipate the number of certification agencies that were going to pop up after the rule passed?

Lipson: No.

Farmer: It was a business opportunity, as people saw it, right?

Lipson: Yes. I would say we didn't really think it through so well, because at least on my part, my expectation and goal in helping instigate the federal law was that certification would become less of a commodity in and of itself, that certification would kind of move to the background, and we'd be able to focus on the research and improvement of organic and figuring it out to do it better. But that has not really happened, partly because it's still not even fully implemented. It took so long. And by the time it came on line, the economic interests had become very gigantic and distorted in some areas, so it made it very difficult to impose a new regime of accountability and transparency. So certification—instead of this neutral, kind of technical function—it has become very much a business, entrepreneurial activity with its own turf to protect. That part of it has not turned out the way I hoped it would.

Farmer: Aren't there funds for new farmers to help with their certification fees?

Lipson: There is a certification cost share program. That was in the 2002 farm bill. Basically that idea came from Jim Riddle, who was chair of the NOSB at the time,

that guy from Minnesota. It's not just for new farmers; it's for any organic farmer. But it ran out of money last year. The 2002 farm bill allocated $5 million for the whole life of the farm bill for that program distributed by states, through the state departments of agriculture. It provided up to $500 a year for up to seventy-five percent of your certification costs, which I think has been a good program. It's the only direct support that you get for being organic. So that has been one of the core priorities in the '07 farm bill, is to renew that program and give it a bunch more money. And in the House bill, there's $22 million for it through the life of the farm bill, and it goes up to $750 instead of $500. So that's a very significant gain. That is happening in the new farm bill.

This year has been really, really remarkable. We had this hearing in April with the new House subcommittee that's got organic, and I testified. Organic has arrived at a place that still is quite out of proportion to its actual presence in the landscape, but it reflects the potential that it has and the background it stands out against. The groundwork that we've been doing for fifteen, twenty years is paying off. The careful nurturing of credibility and respect is paying off, and we're doing the best we can, approaching geezerhood, to be nimble enough to take advantage of it. (laughter)

Farmer: And so you have now a national coalition of organizations, and you're one of the leaders of that.

Lipson: There are numerous coalitions, actually. We're playing a role in the national scene, with a high level of responsibility, trying to integrate organic with all these other things that are happening—local and food security and

conservation. It has its mainstreaming aspect to it. In some ways organic isn't enough, or good enough, or radical enough for some people.

Farmer: What do *they* want?

Lipson: They want "beyond organic."

Farmer: "Beyond organic," right.

Lipson: My response to the phrase "beyond organic" is that we haven't even gotten to organic yet. I mean, it is still not anywhere near fully realized. It's still in a rudimentary state. The whole regulatory thing is only partially implemented. We barely have a trickle of research and development happening. So it's just a fallacy to say, "Oh, well, organic's not good enough; let's get beyond it," because it's still very, very much a work-in-progress.

It all comes back to what we do on the farm, and what we know about what we're doing on the farm. I think I've been extremely fortunate to have had real farming experience. I really worked the dirt on our farm for years, part time most of those years, but full time for some years. I'm still doing it, and observing the behavior of our farming system is what has informed my ability to articulate those issues in the policy arena and in the academic, scientific policy arena.

Farmer: So you have real credibility because of that.

Lipson: I think that has given an important level of credibility. I mean, it's not something I'd wear on my shoulder, but I feel very confident talking about what organic farmers know, and what they don't know, and what we know about

what we're doing, and what we don't know about what we're doing right. We know it works, but we don't really know why. So being able to make that bridge between the field and the practice on the one hand, and the science and investigation of it on the other hand, I think has been really important.

Farmer: And how do you feel about working nationally with all these other farmers and the whole coalition?

Lipson: Well, I love it. I'm a little tired of the travel. It's kind of grueling at my age and state, but it's really vital.

Farmer: Fortunately, at least once a year they come here [to Eco-Farm].

Lipson: Yes. (laughs) Yes, we have a very attractive location that everybody wants to visit.

Farmer: Yes, in January especially. But you have lots of conferences you go to besides going to D.C., right?

Lipson: Lots of conferences I want to go to and people want me to go to. So I can pick and choose, yes. There're a lot of meetings and just a lot of different fronts to be on. We're spread kind of thin.

Farmer: At least it's not falling off, the interest. It's definitely growing.

Lipson: No, no, OFRF is in big demand. That's not going away.

Farmer: Thank you very much, Mark.

Molino Creek Farm

Farmer: This is Ellen Farmer on December 21st, 2007. I'm with Mark Lipson up at Molino Creek Farm [in Davenport, California].

Lipson: Happy Solstice.

Farmer: Thank you. Can you talk about the history of this land that you are farming?

Lipson: Molino Creek Farm is 137 acres. It's an isolated remnant of what was originally the Rancho San Vicente, which was the Mexican land grant in the 1840s. Right here, on what is now our property, was the headquarters of the Rancho San Vicente. It was a grain farm, and there was a mill down on the creek; that's what the creek is named for. Of course, they logged redwoods. I don't know if there was actually a lumber mill on the creek. Most of the twentieth century it was cattle and sheep grazing. Then it became a classic hippie commune in the late sixties, early seventies; went back to ranching for a couple of years, and then what has become the Molino Creek Farm Collective got put together to buy the property in 1982. We've been farming it and homesteading it for twenty-five years now.

Farmer: And have you always been off the grid?

Lipson: The grid has never been here. Actually, the power that goes to Bonny Doon is very close by. It's just off the top of the driveway. There's a 75,000-volt power line that goes up from Davenport to Bonny Doon. So it's very nearby, but

we're not connected to it. We've been on solar electric photovoltaics since we first got here, propane refrigerators. It's gotten a lot more sophisticated over the years. It was very rudimentary at first, but now my house is all on regular 110 power. I've got all the appliances powered by the sun. I have a generator for backup when, in the middle of winter, the sun doesn't come out for a week, but—

Farmer: Has that happened very often?

Lipson: Sure. We've had winters up here with a hundred inches of rain in the El Niño years. If you look at what gets reported for Swanton and Boulder Creek, we're just on the Boulder Creek side of the midpoint there. We get three times what Santa Cruz does and probably four times what Watsonville does. It's the way the patterns back up into the Santa Cruz Mountains. Boulder Creek will get seven or eight times what Santa Cruz will. We're up at about 1,000 feet right here. We're about a mile, maybe a mile and a quarter in a straight line from the water. So it's kind of that middle regime, starting to be real Santa Cruz Mountains but still a little bit coastal. The fog often hangs right off the property, right down in the Molino Creek Canyon. We're just right on the edge of the fog bank in July and August.

Farmer: What does that do for your crops?

Dry Farming Tomatoes

Lipson: Well, it's part of what makes the dry farm system so successful here. We get a lot of heat. We have plenty of high 80s, low 90s [temperatures]. The fog

doesn't really provide moisture to the crops, but it keeps things overall a little bit cool so the plants aren't completely, fatally stressed.

Farmer: Because it's dry farming generally, without irrigation, for the tomatoes.

Lipson: This is the home of the dry farm tomato. This is where that whole method was invented. There was a guy who had started doing it here right around 1980, right before we bought the property, Dick Wadsworth, who subsequently went up to Mendocino and was farming up there doing dry farm tomatoes. He really was the guy who invented the concept. It was still pretty crude when we picked it up from him. We honed it quite a lot. Now it's practically its own category in Northern California produce sections. There are a lot of people doing, or at least trying to do, what we've done here.

Farmer: Well, what is the secret?

Lipson: Don't water 'em.

Farmer: For flavor, right? Their reputation is for amazing flavor.

Lipson: Yes, that's what makes it all worth doing. It's less production, so it's less volume. They have to be more expensive. But it is a spectacular flavor. It's totally unlike what you'd get with the same variety if you were irrigating it.

Farmer: Is there anything about soil amendments that help with that?

Lipson: Sure, both the fertility and the pest management all is different. The behavior of the system is different because you're not adding water, so those are

all little parts of what makes it work. Tomatoes generally will put their roots down twelve, fifteen feet if they need to.

Farmer: Wow.

Lipson: But only if they need to. They won't do that if there's water right near the surface for them. So we force them to go way down to get their water out of the deep soil, of which there is quite a lot because of the rainfall regime that we have. It's a heavy clay-loam soil, so it holds onto that moisture really well. So they will go way down and get the water that they need. And in doing that, they're also in a totally different soil strata, where they're pulling in trace minerals that wouldn't normally be in that upper surface profile, at least not in the same proportion. So that's all part of what makes the flavor so outstanding.

Farmer: Yes. And for a long time, you did sun-dried tomatoes.

Lipson: Well, they weren't sun-dried. They were air-dried. We actually did, for a couple of years, try to do them just with sunlight in a greenhouse. But the fog made that unreliable. If you don't get them dried quickly enough, they start to mold. Sun drying works really nice in the Central Valley, but not on the coast.

Farmer: Were you guys initiators of that?

Lipson: Well, it was part of the California cuisine thing. We certainly weren't the first ones to sell dried tomatoes. We were one of the first organic dried tomatoes you could find that was packaged. We sold them at the farmers' markets. A buck an ounce, I think, was our price. So it would be sixteen bucks a pound. But we

had to do that off-site, and then that was very inefficient, very expensive. Someday maybe we'll get it together to capitalize that part of the operation here. If it was here, it could be really a very nice addition to the repertoire.

Other Crops

Farmer: What else do you have besides tomatoes?

Lipson: Well, these days we do some cut flowers for farmers' markets, a lot of sunflowers, dahlias, and then we do sugar snap peas in the spring and early summer. The peas and the flowers are what get us into the farmers' markets in the early part of the season, because the tomato harvest doesn't start until mid-August, usually, at the earliest. We want to keep our space in the market, so we do some other stuff that's earlier. And then we also do some peppers and odds and ends of other vegetables. We have a small apple orchard, so in the fall we have some apples.

Farmer: Was that a new orchard that I saw down there?

Lipson: Over *there*, there's an olive orchard. There's a new olive orchard. Joe [Curry] got sixty olives for his sixtieth birthday from his brother, Bob [Curry], and it's all different kinds. We'll see what turns out to be good here. Olives should do very well here. And certain wine grapes would do very well here, too. The problem is we're red wine snobs, and where we are is a little cool for growing red grapes.

Farmer: This is a white wine place.

Lipson: It's a white wine place. Actually, Roudon-Smith (at least we were told) was competing to buy the property in the early eighties, when we bought it. They thought it was really good Chardonnay ground. Steve Storrs tells me that all the time.

A Multi-Family Partnership

Farmer: The majority of farmers don't own their own land who are farming around here. A group of people own this land, right? And people come and go?

Lipson: Yes, it's a multi-family partnership. We operate by consensus, which is really difficult. It's not a bunch of Maoist ideologues, more a bunch of iconoclastic individualists.

Farmer: Those must be great meetings.

Lipson: (laughs) Having consensus imposed on that is very challenging sometimes. But it has managed to work for twenty-five years, despite all of the things that bedevil any society in terms of divorces and feuds and, you know—you name it. But it has managed to work. It's sort of a paradox. The people who are here, and even the people who started it didn't all know each other at the time. It wasn't a group of friends with a single vision. It's not an intentional community. I call it quasi-intentional. We don't have a guru or a religion or anything, except for tomatoes. (laughs)

Farmer: Yes. And organic, wouldn't you say?

Lipson: Yes— The paradox is that this mix of skills and experience that we have had in the group is what has made it able to work. But at the same time, that diversity of skills and experience goes along with very diverse styles and philosophies, which makes it really hard to farm together. There are a lot of different ways to approach farming and living on the land that look wildly different and can be totally successful in and of themselves. But trying to stitch different approaches together so that you have consistency in what you're doing is very challenging.

Farmer: Yes, I can imagine. Has there ever been a sense of a leadership style that you've agreed on? Or is it basically the consensus and you have meetings and try different things, different years?

Lipson: Yes, different things, different years and at different times, and responding to circumstances. I'd like it if we had more of a group vision, and more of an intentional plan, but a lot of things that have that component haven't succeeded. They're in the dustbin of history. There are very few community enterprises like this that have survived as long as we have. We're not the only one. There are some brother and sister groups out there that we know of, but—

Farmer: In the region?

Lipson: Yes, there's a few, more up in Sonoma and Mendocino.

Farmer: I don't think I've run across any around here.

Lipson: Well, the Happy Valley Conservancy is sort of analogous. But all in all, really, Molino Creek is extremely fortunate that things have worked out as well as they have—not that it hasn't fallen short of what it might have in some areas. The farm is kind of in decline, and age and infirmity have taken their toll on our cadre of active farmers. Joe Curry was definitely the main operator for quite a while, but his health isn't enabling him to keep going. He's still active, but at a very slow speed. His house is right over there. That's his olive orchard, and his house is right on the other side of the orchard.

Farmer: And then Judy.

Lipson: Judy Low is the full-time partner, who still farms. She was a partner at Happy Valley, actually, before she came here. She's been here since, I don't know, '86, maybe '87.

Farmer: She's in a lot of the photographs on the website.

Lipson: Yes.

Farmer: And then who does the farmers' markets? Everybody?

Lipson: That is spread around. Judy does Palo Alto on Saturdays; Joe and his son Nat are doing the Wednesday Santa Cruz market the last few seasons. I do a lot of the Cabrillo [College] Saturday markets. But when I'm out of town there are a couple of other backups. Chuck Overley does a few. So we're kind of stitching it together on that front.

There are a few aspects of [the farm] that aren't really working so well. The operation now is generating maybe a hundred and fifty thousand in sales. At the peak, about ten years ago, it was more like four hundred thousand in sales. We had twenty-some acres planted wall-to-wall, and a lot of irrigated bed crops and salad crops. We had a lot more of our own labor, and we had big crews. We were running a big enterprise. The farm operation never leased the land from the members as owners. I mean, it's the same group, but— So the land was just being used. And informally, in return for that, the farm business would cover certain expenses of just managing the property, road maintenance, insurance for the barn, and general liability, and maintaining the water system which pumps our domestic water as well as the irrigation water.

Farmer: Is that from the creek?

Lipson: No, there're two wells. In the very, very early years, we did get water out of the creek.

Farmer: The land seems really good for farming.

Lipson: Well, it's a beautiful, beautiful clay-loam soil. It's in pockets. The geology and land formation is pretty interesting. There's a lot of old landslide deposits. But in a lot of places, the marine shale, what we call chalk rock, is right at the surface. You can see it all over the yard here. It's this very light, fracturable— It's ocean sediments, all carbonaceous creatures.

Farmer: This used to be underwater.

Lipson: Yes. Anyway, about the [state of the Molino Creek Farm], fewer of us have been farming; the size of the operation has shrunk. Two of the partners weren't happy with what the collective farm management was allowing them to do. They wanted to be more independent, make their own choices about what to farm, and not have to agree with everybody about that. So they're farming down on the coast. They're full-time farmers, but they're working leased ground on a couple of spots down the coast.

Farmer: Was that Two Dog [Farm]?

Lipson: Yes, Two Dog, yes, Mark and Nibby Bartle. They're still partners here and part of the community, but they're not farming here. The number of our active farmers has shrunk, so the acreage that we're farming has shrunk. The overall business is incapable of covering all that property-management overhead that it used to. So we're struggling to figure out how to deal with that.

Farmer: Do a lot of people work off the farm?

Lipson: Yes. Some are actually retired now, but most of us commute off the farm, work in town, or have jobs that let us telecommute from here. Kids and land payments have required a higher level of income than the farm could provide. So, yes, it's a complicated mixed model. But endless possibilities. The place can be extremely productive and profitable. There's no doubt about that. But an operation needs to be capitalized and have a real tight, sophisticated business management to survive as a small farm.

Farmer: Do you sell to any retail outlets or anything like that?

Lipson: Oh, yes, sure. The dry farm tomatoes—maybe a little less than half of what we do goes to farmers' markets, and the rest goes to Whole Foods and some other retail buyers, a little bit to wholesaler resellers, Coast Produce and Veritable Vegetable and those guys. But, most of the stuff that isn't going to farmers' markets goes to Whole Foods or some of the markets on the peninsula. We have one Andronico's account, Draeger's—

Farmer: The high-end stuff.

Lipson: Yes, yes. Our deal with the dry farm tomatoes is totally unlike any other tomato produced. For years, people would say, "You're charging what? You can't charge that for tomatoes. That's ridiculous." But over time we trained buyers by saying, "Look, these taste really different, and people are going to come into your store and ask for them, because they get them at the farmers' market, and they're going to come in and say, 'Can you get those Molino Creek tomatoes?'" And over the years, that's what happened. We established a price-making position that nobody else had ever had, and made it work.

Farmer: Now, was part of that working with the organic aspect of it? Or was it mostly the tomatoes themselves, and the flavor?

Lipson: Well, organic was always the baseline. I did the sales for years. I was the main contact for sales, and the marketer. I always made it clear that the organic system was essential to producing that flavor, that you could not do this unless it was organic, because holding onto that moisture requires a lot of organic matter

in the soil. You can't do that with conventional fertilizers. They're deleterious to the biological system.

The Interplay of Farming and Policy Work

Farmer: So how did working with CCOF and OFRF combine with being a farmer? They must have really informed each other.

Lipson: Yes, but it was always very difficult to focus fully on one. I had the town job and big farming responsibilities simultaneously for a lot of years. Ultimately it was not sustainable to do that. I had really stopped farming substantially. I was only doing maybe a couple hundred hours a year, doing weekend markets and some of the pest management stuff, before I got sick, even. In '98, '99 I was already out of the day-to-day farming operation.

Farmer: Well, was part of that because the organic legislation was ramping up?

Lipson: Yes, a big part of it was. When the proposed federal rule came out in '97, it was kind of all hands on deck for that. That's really when I went to being totally full time in town. And as my role in the organic policy arena grew and took on more scope, it just wasn't possible to live up to a split career, kind of doing farming on a part-time basis. I'd be out in the fields really early, doing stuff and getting the orders out, and then get to work at ten or ten thirty in town. Doing that shift in gears was really exhausting. But what you're asking about is, in terms of the enrichment between those two worlds?

Farmer: Yes.

Lipson: Absolutely. I learned a tremendous amount analyzing organic research at OFRF and talking to farmers all the years I was at CCOF. I learned a tremendous amount, all kinds of stuff I would never have known. And likewise, or conversely, being an active farmer and really knowing what that meant, I believe gave a lot of credibility to what I was able to do as a representative of farmers in the policy arena. I wasn't vulnerable to the critique that you might hear from the Farm Bureau or somebody else, saying, "Well, they're not real farmers." We had become real farmers. Organic farmers were real, full-time farmers, not just sort of lifestyle hobbyists. So I think I was extremely lucky to be able to have that combination of roles.

More on the Farm Bill and the Future of Organic Agriculture

Farmer: Well, do you want to talk about the farm bill a little bit?

Lipson: Sure. This year I spent about a week a month in D.C., on average, since early spring, and I got a very close-up look at it all. We were really fortunate to work with folks in D.C., particularly the Sustainable Agriculture Coalition. Ferd Hoefner, this is his fifth or sixth farm bill, and he is completely interconnected with all the senior staff people in Congress, so we were able to get a very close-up window into the whole process, and organic certainly had a higher profile than ever before.[22] So we've had some access to a certain level of the inner process, and we've applied some skill and some experience to being there in that, which has paid off in having a fairly significant increase in both funding and policy attention in the farm bill. It's still around the edges. We think there are

wider benefits to what we're doing, but still, we're focused on the organic provisions.

The main, number-one thing that I worked on for OFRF in the farm bill is research funding. But certification cost share is also a big priority for all the organic groups. There are policy fixes for the crop insurance program, which treats organic rather unfairly and is part of what's inhibiting the growth of organic production domestically. And then we're trying to get organic more integrated into the conservation support programs and create specific policy to help encourage organic conversion, transition to organic. Because even though the U.S. market demand for organic continues to skyrocket fifteen, eighteen, twenty percent a year, very steadily an increase in retail sales, there is not anywhere near that kind of growth in domestic production. We're not getting a lot of new, transitioning organic farmers, especially in the Midwest grain belt. And there are a lot of obstacles. We talked about the land ownership thing a bit. It's very hard to invest in the long-term biological productivity of land when you only have a lease for a couple of years. Or even if it's four or five years, which is really unusual, that's still a short time horizon when you're talking about recreating a robust agroecological system. The crop insurance is part of the problem.

But the single biggest limiting factor that's common to all areas of the country is the lack of information. There is still only a trickle of extension and university resources that are available for people who want to transition to organic. While the market has exploded and charged ahead, all the infrastructure and support

systems for sustaining that are still growing very, very slowly, *very* incrementally. It's taken us ten years to push USDA funding for organic work up to— In the 2007 fiscal year, it just crossed one percent for the first time, even though organic is now approaching four percent of overall market share.

A big problem is the dominance of genetic engineering as the basis of agricultural technology. You can't overstate that. It's so completely overwhelming, and it's having secondary effects in terms of the demise of co-op extension in general, because the technology is all in the seed. It's all about just managing your inputs to facilitate the way the seeds are designed or the animals. So the role and mission of [Agricultural] Extension[23] as educators and integrators of information is, by implication, being rendered obsolete by all the technology and knowledge being in the seed or the genes, the germ plasm of the animals.

So anyway, back to the farm bill. That whole question of: how do you encourage transition to organic and overcome some of these obstacles is one of the tougher policy questions that we've had. It's one of the weaker parts of the overall package that we're coming out with, because we really don't have a good idea about how to do it yet, and especially with a Department of Agriculture and an administration that really is not that interested in it— They're giving it a lot more lip service these days, because it gets a lot of attention in the media and there are a lot of farmers asking them to support it. But there's going to have to be a real sweeping set of changes within USDA, within the agencies and institutions, before you can even effectively implement policy, even if you can get Congress to do it.

We're going to be wrapped up in conference negotiations and playing defense on the money that we've got in the bills for the next few months. But then that's all really only a prelude to actually making it happen on the ground. So implementation of what's in the farm bill for organic—that'll be the real job. And now that we've created the presumption of sort of more acceptance and integration into the policy framework, we'll have to figure out how to actually make that work with the people who have to implement it.

Farmer: And then there is energy, all the amendments in terms of farming for fuel.

Lipson: Well— That's a big frenzy. A lot of it doesn't really make sense.

Farmer: And it's all GMO [genetically modified organism], right?

Lipson: Yes, all that ethanol is GMO corn, and it's corn that requires enormous amounts of wasted nitrogen fertilizer. There was just an article I saw a day or so ago about the hypoxic zone in the Gulf of Mexico. And some of the scientists are saying, "It's not getting smaller." The danger is large-scale ecological collapse. There is 8,000 square miles of ocean that is incapable of supporting ocean fauna. It's the benthic organisms, the crabs and shellfish and the bottom dwellers, that are most completely asphyxiated. That's where the oxygen depletion is the strongest, is at the bottom. But the whole food chain goes from there. So the objectives of having more fuel from agriculture are really at odds with the other objectives that we need to have for the environment and for rural communities, not to mention food.

Farmer: Well, I was watching C-SPAN, and it was interesting to watch some of these senators talking about farms as if the image of a farm or a farmer is like we are here at Molino Creek, not talking about the big farming industry as it really exists and as the lobbyists are being supported by it.

Lipson: It's rather Orwellian. (laughs) And hypocritical. And just not sane. It's not rational. Being in the middle of the farm bill process has been— It's a fascinating and kind of unique part of the policy and political landscape. It's treated differently than a lot of other issues. It has many unique attributes that are all its own. But the overriding thing is that it is not rational. In Washington you have to have data and logic and arguments, and you have to put all those together to contend at all. If you aren't able to marshal those, then you get easily blown away. You have to have that as a minimum condition, but that is *not* what's decisive in the end. All that does is sort of keep you in the game. But ultimately, decisions are not made based on rationality and logic. I mean, not in an overall sense. Obviously, there's very specific, very cold logic and rationale on an individual legislator basis, but the logic of greed and power ends up controlling things. It's not an objective, good-for-society logic.

You know, watching C-SPAN you still hear people blather about America feeding the world, and that is one of the stupidest lies, really. America is not feeding itself. Yes, we ship a lot of grain around the world, but the U.S. has been a net food importer for several years now, and that's going to get worse and worse really quick. We've set that up economically for that to be the case. And in addition to that, the whole infrastructure of the U.S. food supply is getting more

and more fragile. You have food safety issues. You have labor issues. You have tremendous energy cost issues, which ethanol is not really going to get us out of. The cost of food is rapidly escalating. There's a big article in the latest *Economist* magazine about the end of cheap food, and it's been picked up by a lot of columnists and writers in the last couple of weeks. The last five years have seen a change in the global cost of food that is radically different from the last hundred-some years. *The Economist* magazine has a food cost index that goes back to before 1900. It's just like this really flat line all the way along— In the seventies it starts bumping up and down, and then in the twenty-first century it's just goes straight up. That's going to be a permanent feature of the landscape.

Then there is the cost of oil and natural gas for making synthetic fertilizer. There are so many points of vulnerability for the system that we have. So whether or not we can cultivate a robust, more regionalized food system before the rest of it falls apart, I don't know.

When people talk about why did we start organic— You know, there's a lot of dispute and sort of retrospective debate about organic. "Is what's happening now part of our vision that we had at the beginning? Haven't we betrayed our roots and let it become corporatized and owned by Wall Street? That isn't what we were doing when we started all this." I think a lot of that is very muddled, and a lot of the people who talk about that really weren't there at the beginning either. (laughs)

But one thing that very few people do talk about that was, I think, at the root of what a lot of people had in mind when they went back to the land, or thought

they were going back to the land and then tried to start farming, was this idea of a fallback, that this civilization is not going to be able to sustain itself and organic agriculture is preserving some kind of capacity to withstand the shocks of the large-scale industrialized system being disrupted. I think that is starting to come back a little bit.

Farmer: With the local movements.

Lipson: Yes, and the whole discussion about peak oil. For the last hundred years we've had this one-time free bonus of all this petroleum to produce synthetic nitrogen fertilizer. When that goes away or declines, how are we going to produce food? We're going to have to have something that is rooted in what organic agriculture is now. Organic agriculture, I think, is still very rudimentary. We are still at a very rudimentary stage of being able to have really productive, resilient, non-toxic systems. We're doing it with a lot of Band-Aids and crutches that are borrowed from conventional agriculture. The research and development input into organic just has never been significant. So comparisons about—well, you couldn't feed the world organically, or we couldn't survive economically organically— Well, the system that we have has had *billions* of dollars and *thousands* of scientists working very assiduously on it for many decades. And that input is what has produced the success of the system that we have such as it is. So what could be the potential of organic systems if they really had that input of science and development? We haven't even begun to imagine that.

Farmer: Do you think the shock of the Depression and the Dust Bowl was actually part of the motivation for industrial agriculture?

Lipson: Sure. The Dust Bowl was a phenomenal ecological disaster.

Farmer: So some of the members of the Senate today were children during that time, or young, and that was the atmosphere.

Lipson: Sure, yes. They believe in the great bounty that agricultural technology has produced and don't see so clearly the side effects, the negativities, the quote-unquote "externalities." But those are all catching up. One out of four people will have cancer in their lifetime right now. Human fertility in our advanced, industrialized countries is declining very rapidly. Obviously, there are going to be big changes in climate and weather. But what is going to bring it home for people is when it really impacts the food supply, and that's going to happen. There are a lot of things that are kluged together right now. And then you have these health crises that are diet-related: diabetes and heart disease. Our ability to change those is going to be severely limited by the corners we've painted ourselves into with respect to our food supply.

And I know a lot of people who are talking about not farming next year because of the labor issue.

Farmer: Right here in this region, or all over the country?

Lipson: In California.

Farmer: Wow, not farming. What does that mean? Doing something else to make a living?

Lipson: Yes. Who knows? Some places, they can sell their water rights. But the anti-immigration thing is so out of hand, and labor is going to be difficult for a lot of people as that continues.

Farmer: Aren't there farmers from here that actually have farms in Mexico?

Lipson: Oh, yes. Our country is outsourcing our food supply quite deliberately. But that makes us really vulnerable. It's going to be very costly. Who knows what's going to happen? But I think there is a lot of momentum for the idea of local food. Buying local has not yet turned into farming local. Everything that we need *can* be grown here. But that doesn't mean that we, our communities, are really focused on how that's going to happen.

And now you have very spasmodic kinds of things, like what's going on with the light brown apple moth.[24] People's fear about the pheromone spray is translating into, "Oh, well, I don't even want to eat food that's been grown around here if that stuff's being sprayed on it. In order for me not to get sprayed, if that means the farmers around here can't operate, well, too bad." We're in the quarantine zone here. We've signed a quarantine inspection agreement for next year, and it's going to be extremely invasive. We may not be able to have a season next year because of that. The spray treatment of the residential parts of the county really isn't going to affect that one way or the other. But it's just another example of the fragility of the system, and how difficult recreating something that is really a robust, local food supply is going to be. Even though we *can* grow everything we need here, you can't take for granted that that's going to happen. We're not necessarily doing what we need to do as a community or as a society to sustain

that. We take it for granted. But the tipping points can change things really quickly.

Farmer: Yes. So there's a lot of work to be done in all of this.

Lipson: There are young people who are really seizing the initiative. What's going on down at Pie Ranch is one example of that.[25] I'm so enamored of what those guys are doing. I do see a lot of good, young enthusiasm. The question is how do we enable that to be sustained. Because a lot of people just don't see the opportunity to do what they'd like to do, or think they'd like to do, in terms of farming and being in agriculture.

Farmer: OFRF gives grants, right, for educational programs?

Lipson: Oh, yes. That certainly is growing. OFRF—its grant program is waxing. We've always had kind of an educational component in our guidelines but not that many grants. But now we have a very explicit, separate program for educational grants focused on education for farmers. So that's going to start putting a lot of very interesting stuff in the pipeline.

Farmer: And those are done on a national basis, right?

Lipson: Oh, yes. And the outcome of the farm bill will be significant. Even though it's not billions of dollars, hopefully there'll be some hundred million or so that'll really be directed at organic. And that'll pull a lot of other resources in along with it.

Farmer: That's a lot more than it's ever been.

Lipson: Yes, which also begs our ability to utilize that. The Peter Principle looms large in our own organizations and institutions. That's one of the things I'm most concerned about, is the competence and ability to respond to changing circumstances by our own networks and organizations and coalitions. We've been on the outside for so long, and focused on fighting for legitimacy. Now the battle is different, and we're not necessarily prepared for that. Intentionality about where things should go is what we've been lacking. The conflicts right now around all the dairy stuff and the Horizon [Dairy] and Aurora [Dairy] milk, and pasture rules and all that, are, to me, a failure of intentionality.[26] We kind of created things, and then the market just took off without having the community and movement infrastructure to govern that better. I don't know how to solve that problem. Organic Valley is the best model we have of expansion and development that stays rooted in a regional system. But even there, the pressures are tremendous.

We want to have it all. We want to have our solar-powered satellite computers and still have this kind of peasant sustenance. It's a nice idea. It takes a lot of scrambling to keep it all together. That is what I get glimpses of here, the lifestyle that I have. I consider myself the most privileged person in the world. I mean, really. I worry a lot about living up to that, which is what drives my work. But yes, we own good land to farm in a wonderful climate. We have a community of people who support each other and take care of each other. What else could you ask for?

[1] See the Regional History website for oral histories with Jim Pepper, Kenneth Norris, and Raymond Dasmann that cover the history of environmental studies at UC Santa Cruz—http://library.ucsc.edu/reg-hist/
[2] See the oral history with Scott Roseman of New Leaf Market in this series.
[3] See the oral history with Barney Bricmont in this series.
[4] See the oral history with Richard Merrill in this series.
[5]Farmer is referring to the Loma Prieta Earthquake, 6.9 on the Richter scale, which hit Santa Cruz on October 17, 1989. See *The Loma Prieta Earthquake of October 17, 1989: A UCSC Student Oral History Project* at http://bob.ucsc.edu/library/reg-hist/quake.html
[6] See the oral history with Reggie Knox in this series.
[7] See the oral history with Bob Scowcroft in this series.
[8] "A watershed event in the consumer food safety crisis was the release of *Intolerable Risk: Pesticides in our Children's Food* by the Natural Resources Defense Council (NRDC) (Sewell *et al.*, 1989). The report attacked procedures used by the Environmental Protection Agency (EPA) to estimate health risks from pesticide residues and the time taken to discontinue a pesticide's use once it is found harmful. At issue was a breakdown product of the growth regulator daminozide (trade name: Alar), which is sprayed on apples to prevent preharvest fruit drop and to delay fruit maturity and internal decay. Studies have shown that a component and degradation product of Alar, (unsymmetrical) 1,1-dimethyl- hydrazine (UDMH), may be carcinogenic. By NRDC estimates, Alar posed a particular risk to infants and children, who because of their low body weights absorb disproportionate amounts of residues from apples and apple products. A *60 Minutes* broadcast and other media coverage about the report created nationwide panic. Numerous school systems banned the sale of apples, parents poured apple juice down the drain and super-markets began independent testing of their produce for pesticide residues (Aidala, 1989). A new special interest group, 'Mothers and Others for Pesticide Limits', was launched to arouse citizen action for legislative reforms and increased availability of organically grown produce. Farmers were unable to meet supermarket demands for pesticide-free fruits and vegetables, while apple growers lost more than $100 million in reduced sales and prices. Although government and other scientific experts refuted NRDC's charges, public outrage eventually resulted in Alar's voluntary removal from the domestic market by Uniroyal Chemical Company." M. Elaine Auld, "Food Risk Communication: Lessons from the Alar Controversy," *Health Education Research* Volume 5, No. 4, 1990. pp. 535-543.
[9] See Marian Burros, "The Fresh Appeal of Foods Grown Organically," January 28, 1987. *New York Times*, Pg. C1.
[10] "J.I. Rodale, who believed that modern agricultural techniques and American eating habits left quite a bit to be desired, founded Rodale Inc. in 1930. He knew that there was a direct relationship between the declining health of America's soil and the health of America's people -- a revolutionary view in those days. In 1942, he started *Organic Farming and Gardening* magazine, which taught people how to grow better food by cultivating a healthier soil using natural techniques. J.I. put his theories into practice on a 60-acre farm near Emmaus, Pennsylvania, which is now the site of the Working Tree Center. J.I.'s ideas slowly took root and spread and he is widely recognized as the father of the natural food and natural living movements in America." See: http://www.rodale.com/1,6597,1-101-211,00.html. See also, "Oral History Interview with Robert Rodale," by the Alternative Farming Systems Information Center at the National Agricultural Library, NAL Call No. Videocassette #670.
[11] See the oral history with Zea Sonnabend in this series.
[12] Lipson is referring to the California Organic Foods Act of 1979—Editor.
[13] See the oral history with Congressmember Sam Farr in this series.
[14] In February 2009, President Barack Obama chose Kathleen Merrigan as deputy secretary of agriculture, the number-two job in the United States Department of Agriculture. In a message to attendees of the third annual Organic Summit (www.theorganicsummit.com), Merrigan pledged that organic will be integrated across all agencies at USDA. Delivering pre-recorded comments, Merrigan stated that, "here is where I'd like to fulfill a promise I made to many of you…and that is, organic should be integrated across all the agencies, not just the NOP, but each and every agency at USDA should have some engagement with the organic sector." In addition to her words about integration, Merrigan said, "Organic can no longer be stove-piped at USDA." See

http://www.theorganicsummit.com/os09/public/Content.aspx?ID=1009153 Merrigan was also a prominent speaker at the 2010 EcoFarm conference.

[15] Mitchel Benson, "Carrot Crisis Organic Veggie Scam Alleged," May 11, 1988, Page 1A, *San Jose Mercury News*.

[16] See the oral history with Bob Scowcroft for more on the founding of OFRF.

[17] See http://ofrf.org/publications/o-word.html

[18] United States Department of Agriculture Study Team on Organic Farming. *Report and Recommendations on Organic Farming*, Washington DC: United States Department of Agriculture, 1980. 94pp.

[19]The Sustainable Agriculture Network is an online listserv operated by Sustainable Agriculture Research and Education (SARE) since 1991. See http://lists.sare.org/archives/sanet-mg.html

[20] See the oral history with Sam Farr in this series.

[21] Jane Sooby, Jonathon Landeck and Mark Lipson, *2007 National Organic Research Agenda, Soils, Pests, Livestock, Genetics: Outcomes from the Scientific Congress on Organic Agricultural Research (SCOAR)*, Organic Farming Research Foundation, January 2007. See http://ofrf.org/publications/pubs/nora2007.pdf

[22] "Ferd Hoefner is the policy director of the Sustainable Agriculture Coalition (SAC) and has worked for the coalition since its inception in 1988. SAC is an alliance of national and grassroots organizations that together take common positions on critical federal food, agricultural, environmental, and rural policy concerns, working toward a food and agriculture system that is economically profitable, environmentally sound, family-farm based, and socially just." http://www.wkkf.org/default.aspx?tabid=102&CID=19&CatID=19&ItemID=190737&NID=20&LanguageID=0

[23] The Cooperative Extension Service, also known as the Extension Service of the United States Department of Agriculture, is a non-formal educational program implemented in the United States and provided by the state's designated land grant universities. In most states the educational offerings are in the areas of agriculture and food, home and family, the environment, community economic development, and youth and 4-H. It is also referred to as Agricultural Extension.

[24] During the time this interview was conducted Santa Cruz County and other counties in California were embroiled in a controversy about how to control the light brown apple moth (*Epiphyas postvittana*). For one perspective see http://www.panna.org/resources/lbam

[25] See the oral history with Jered Lawson and Nancy Vail of Pie Ranch in this series.

[26] In 2006, the Organic Consumers Association called for a boycott of Horizon Organic and Aurora Organic Dairy, charging that the company was not following organic standards. In August 2006, the Cornucopia Institute filed a complaint with the USDA alleging that Horizon violated National Organic Program standards about the number of days cows should spend in pasture.