



Camphill Village Kimberton Hills

© Bruce Bumbarger

A Holistic Future for Farming: Self-Sufficiency on a Small Family Farm (Part Two)

Henning Sebmsdorf

The following is part two of an edited version of a keynote address delivered at Rural Roots Small Farm Conference: “Making The Local Connection” held at the University of Idaho, Moscow, ID, on Saturday, March 19, 2005. Part one appeared in BIODYNAMICS 153. The author and his wife farm and teach at the S&S Center for Sustainable Agriculture and Homestead Farm on Lopez Island, WA.

In conclusion, let me suggest some ideas about a holistic future for S&S Homestead Farm, and about farming and the food system in America in general.

First a few remarks about Holistic Planning and Management as a methodology. Quite a few years ago, I got involved in a two-year training course offered by Alan Savory’s “Center for Holistic Resource Management” Broadly speaking, Savory’s model for testing and managing ideas during

planning and implementation was developed when he farmed in Africa, but later grew into a methodology that could be applied to any field or resource base. Savory’s ideas and methods seemed strangely familiar to me, because I had thought along similar lines for a long time, but it supplied me with a new and precise language to organize my goals on the farm. The approach of considering the “whole” under management (people, resource base and money) by relating it to an overarching goal involving quality of life values, forms of production and a vision of what the resource base – the farm – should look like in the future, seemed intuitively right and helpful. “Holistic Resource Management” taught me to identify the building blocks of the farm ecosystem, the water and mineral cycles and energy flows on and through the farm, as well as the social dynamics of the surrounding island community. I learned to think of

human creativity, money, and labor as tools to achieve larger holistic goals, and learned methods of making, testing and re-testing plans, looking for weak links, cause and effect, and impacts both on the biological and the social environment.

The benefit of this method for any farmer is not only to help maximize efficiency of resource use and increased profitability, but to help answer the ultimate question of why he or she is farming at all and to what purpose, and to let the answer to that question shape everything that happens on the farm on a daily basis. For me, the answer to that question has to do with the future of agriculture in America, with public health and environmental stewardship, and with the survival of a democratic society. All of these concerns are intimately connected and have direct consequences for how we imagine the future of this farm.

America is now importing more than fifty percent of all foodstuffs and, if current trends continue, in the near future will import most of the food consumed in this country. At the same time, we hear from agricultural economists that large-scale American agriculture soon will no longer be able to compete in the world market for labor, land, water and other resources and likely will be phased out within a generation or so, except for the production of certain commodity crops such as soy, corn and wheat. The consequences of this trend for large-scale agriculture to focus on commodity markets far away rather than feeding folks at home, are manifested right now in the fact that in the state of Washington, for example, one of the largest food-producing states in America, more than 100,000 children are going to bed hungry every night, and many more families can feed themselves only with the help of food banks. Between 2001 and 2003 an astonishing two million visits were made by hungry families to food banks in King County alone, among them 586,000 children who came on their own (*Building a Sustainable Community Food System in Seattle and King County: Concept for Developing a Local Food Policy Council*, 2005, 1). Add to that the declining nutritional quality of foodstuffs provided by the global markets, causing more than sixty percent of the population of my home state to be overweight, if not clinically obese, and add, finally, the looming threat of bio-terrorism to which large-scale production and distribution systems are particularly vulnerable, and you are led to the inescapable conclusion that our current food system is fundamentally and chronically insecure.

It seems apparent that the remedy to these problems is to strengthen small-scale, local agriculture and community food systems. However, the remedy can be implemented only if we think and plan holistically beyond the profit mo-

tive to embrace nutritional, environmental and community health as farm goals. Small, local farms must become resource self-sufficient and community-interdependent, and farmers must think beyond their own lifetimes and make the training of the next generation of farmers an integral part of their own production goals.

Over the years, S&S Homestead Farm has tried to meet this challenge through the development of an educational outreach and research program organized through a self-supporting, state-registered non-profit organization, S&S Center for Sustainable Agriculture (SSCSA). Educational programs include classes in ecological food production for high school students offered in collaboration with Lopez Island Schools, a curriculum-based internship program offered in collaboration with WSU's Center for Sustaining Agriculture and Natural Resources (CSANR), where I hold an adjunct faculty position, as well as on-farm workshops, farm tours, and public presentations organized mostly through conservation districts and WSU Cooperative Extension in San Juan County and on the near mainland.

On-farm research has mostly focused on demonstrating the technical and economic feasibility of small-scale production methods that are environmentally sustainable, enhance farm self-sufficiency and support local food security. We have been able to attract grants to support these efforts. In 2001–2002 we received a small grant from SARE (Sustainable Agriculture Research and Education, a program funded under the Congressional Farm Bill) to grow barley on small acreage using appropriately scaled equipment. The successful experiment demonstrated how to prevent nutrient run-off in winter sacrifice areas, while providing the farm with animal feed and meet the need of local farmers for organic grain.

Another grant we received from SARE linked the ecological food production class with a farm-to-school project that supplies the local school cafeteria with fresh greens for their lunch menu. We hope that the success of this project will lead to a permanent school curriculum in environmental and nutritional health.

A third SARE grant supports on-going replicated field trials comparing farm-produced biodynamic soil stimulants with lime applications to balance soil pH, increase availability of N, P, K, micronutrients and soil organic matter in small-scale forage and hay production.

A fourth project supported by a grant from EQUIP (Environmental Quality Incentive Program offered by the Natural Resource Conservation Service, NRCS) allowed us to research and develop a solar-powered irrigation system that collects rain water off the barn roofs, stores the water in a 750,000 gallon pond from where it is returned to irri-

gate the orchard and vegetable production sites during the typical summer drought, thus minimizing demand on limited groundwater resources, while at the same time benefiting plant health through irrigation with soft rainwater instead of hard groundwater.

While these grants are typically small, they benefit both the production side of the farm and its educational outreach programs by focusing our energies on finding solutions to specific problems and by bringing research expertise from the land grant university to our small farm. During the last few years we have benefited enormously from collaboration with university and extension agents and researchers bringing their know-how in engineering, soil science, microbiology, plant, and forage systems, and agricultural economics. We have also been able to write modest support for our interns into these grants, so that students pursuing graduate degrees in various fields have opportunities to integrate their research interests with on-farm training. This year, for example, we will be hosting three interns pursuing M.S. degrees in soil science, nutritional science and agricultural economics at Washington State University and Bastyr University in Seattle.

One of these interns will be dividing his time between work and study on the farm and on developing our Future Farm Project through the Lopez Community Land Trust (LCLT). My wife and I feel strongly that the production capacity, cumulative experience and research-based knowledge accruing over the years on a holistically managed, small farm should not be allowed to vanish once the current owners get too old to carry on the work. The Future Farm Project envisions collaboration between the land trust which would own the farm, the Lopez Public Schools, and WSU's CSANR which would develop a region-wide training program on the farm. Together with CSANR, we have applied for an implementation grant from SARE and are waiting to hear this spring whether the application has been successful.

Elizabeth and I hope that the project will go forward. We share Thomas Jefferson's view famously expressed in a letter to John Jay in 1785, that the "cultivators of the earth" were the surest guarantee of a free society because a citizenry whose livelihood was independent of distant markets was free to vote their minds instead of their pocketbooks. Updated to the urgent concerns of the twenty-first century, a self-sufficient small family farm also offers other, equally important, solutions to the problems of nutritional and environmental health, local food security and protection against bio-terrorism, as well as economic viability.

I want to end with another compelling piece of data gleaned from the seminar on "Agricultural Systems and Nutrition" I mentioned before. Adam Drewnowski, Professor

of Medicine and Epidemiology who organized the seminar, presented what he called epidemiological maps of New York City and Seattle to show the correlation between zip codes and obesity rates. The connection seems absurd because we tend to believe that obesity reflects personal choice in foods, but the maps provided overwhelming evidence that obesity is directly related to affordability. The households clustered around the perimeter of Central Park commanded median incomes of \$180,000, while the households just north of the park had incomes of less than \$10,000. Obesity rates among the well-to-do Central Park residents were between 4–7%, those of the working poor just north ranged between 23.5–28.3%. These data show that the claim that American households on average spend 13.2% of their income on food is misleading. Surely a family that commands a six-figure income has access to the very best, i.e. nutritionally vital, fresh and flavorful food, while a family with an average income just over five percent of the Central Park incomes will have to choose the cheapest and nutritionally deficient foods. This does not mean, of course, that the well-to-do always make wise food choices, nor that the working poor necessarily have to be obese. Rather, it seems that in this age of advertising the nation as a whole is addicted to much traveled and nutritionally depleted foods whose principal virtue is that they are abundant and cheap. For example, former president Bill Clinton, surely a man of large appetites, was known for his love of the Big Mac, a love that probably contributed to his massive cardiovascular problems that forced him into radical heart surgery to save his life. On the other hand, both in New York City and Seattle, Drewnowski found community neighborhoods where median incomes were low, but so were obesity rates. Interestingly, these neighborhoods are mostly populated by recent immigrants who grow substantial amounts of food in urban gardens, and whose native food traditions probably help them choose and prepare foods in healthful ways.

In sum, holistic health and holistic economics go hand in hand. It would seem that everyone could enjoy the holistic high-life if we strengthened community-based, local food production. For the sake of a healthy environment, healthy communities, and healthy people, food growers and food consumers need to re-establish the local connection.

Henning Sehmsdorf and his wife Elizabeth farm and teach at the S&S Center for Sustainable Agriculture and Homestead Farm on Lopez Island, Washington. They recently hosted a workshop entitled "Real Food On The Farm: A Workshop Presenting Nutritionally Vital Foods that Promote Health and Healing. Photograph of cattle courtesy of Stephen Bramwell.