Seeing The Light Mary-Howell Martens (with Klaas' help!)'

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"I wish you didn't have to do that!" I was standing by the kitchen door, several months pregnant with our second child, as I watched my husband, Klaas, leave the house dressed for battle in his white Tyvek 'zoot suit' and special green plastic gloves, ready to attack and subdue the enemy.

"Me too, but what choice do we have?" It was 1991, the first year we began farming on our own. It was not easy farming over 600 acres, just the two of us. Farm prices are never good, weather is always risky, but at least we had one advantage. Weed control was rarely a problem since Klaas was good at planning herbicide combinations and schedules. In my job in the grape breeding program at the New York State Agricultural Experiment Station, I was also responsible for planning the breeding vineyard spray program, so Klaas and I spent many romantic hours of our courtship discussing the relative merits of various chemicals.

Later, after a long and successful day of spraying, Klaas would invariably come in the house with clothes reeking of pesticide despite the Tyvek suit, his head aching and a queasy stomach. We wanted to believe that it was due to 'just a germ' since he had been working such long hours, but we knew better, we knew that he was slowly being poisoned.

How do two people so apparently committed to the agribusiness ideal of American farming end up operating over 1300 acres organically just 10 years later? We truly believe that we were like many conventional farmers, using the chemical fertilizers and pesticides because we saw no other alternatives, but we were very concerned about what it might be doing to us, our family, our land, and our environment. We farmed conventionally because we had been told so often that it was the only way to survive in agriculture today.

Then we read a small classified advertisement in a regional farm paper looking for organic wheat. Immediately Klaas was on the telephone and we were excited - was there really a market for organic field crops? We quickly decided that this was a challenge we wanted to try. If there was a way to grow our crops organically, we were going to figure out how!

LEARNING FROM OTHERS AND BUILDING NEW YORK CERTIFIED ORGANIC

Since then, our education has gone into overdrive. Our greatest resource has been other people. We discovered several farmers in the area who had been farming organically for years. They have been of



invaluable help with advice, patience, and encouragement, generously sharing their knowledge with us and others. We also have benefited greatly from the help of older farmers in the area who remember how they farmed before the advent of chemicals. One neighbor, Cliff Peterson, is a true master at setting and running the cultivator, a valuable skill he learned as a boy farming with horses. Without his patient help, our weed control would be much less successful.

Transition is a frustrating period for many people and without the examples of other organic farmers who are successful, we might have concluded that organic farming would not work.

We are active in a local educational group of organic farmers, New York Certified Organic, which

provides an inclusive community of educational programs, support and information for both new and experienced organic farmers in our area. Frequent meetings offer us an opportunity to share and learn from each other and from other experts on many important topics relating to organic farming. Many NYCO members are FVO certified as we are, but NYCO also includes members who are certified by other agencies or who are simply interested in organic farming.

INPUT SUBSTITUTION AND THE TRUE ORGANIC SYSTEM

As farmers learn organic practices, the first two questions invariably seem to be: "what materials do I buy for soil fertility?" and "what machinery do I buy to control weeds?" Though we too asked these questions at the start, we now know that an organic farmer can not merely substitute an 'organic' input directly for a conventional 'input.' This 'input substitution' approach will not work agronomically nor economically, nor does it satisfy the long term requirements of organic certification standards. Successful organic farmers really must change their total approach to farm management, adopting a much broader and more wholistic approach.

SOIL FERTILITY MANAGEMENT

Under the organic system, soil biological activity is the main source of fertility. Probably the most valuable 'inputs' that a transitioning farmer can purchase are good quality soil tests and the assistance of someone skilled in organic soil fertility management to help evaluate the results and recommend appropriate amendments. On our farm, our soil fertility is dependent on cover crops and crop rotation to improve soil tilth, to increase soil organic matter, to increase soil microbial diversity and activity, and to protect the soil from erosion. Moderate amounts of inputs, such as composted leaves, gypsum, composted poultry manure, and other approved organic fertilizers, are used generally to balance soil nutrients and correct deficiencies, but not to provide the primary sources of fertility.

WEED CONTROL

Weed control presents THE primary challenge to organic crop farmers. Organic weed control is an integrated program, consisting of certain cultural methods which limit initial weed populations and mechanical weed control methods which remove weed pressure. Practices that improve crop vigor while creating an environment that does not favor weeds, will usually improve weed control. A well designed crop rotation, the use of cover crops and allelopathic crops, balanced soil fertility, clean, high vigor seeds of well adapted varieties, and improving soil tilth are effective cultural weed control practices.

Mechanical weed control can be divided into 4 distinct phases of (1) Tillage (2) Planting (3) Blind Cultivation, and (4) Cultivation. Choosing the best tools for soil and plant conditions, timing operations properly, and being alert of changing conditions and requirements is extremely important for effective mechanical weed control.

ORGANIC QUALITY

Organic products are commanding a premium price in the marketplace primarily because they are perceived as being higher quality. Therefore, as organic farmers, it is our responsibility to work hard to make sure that this is true, and that all products leaving our farms are indeed of as high quality as absolutely possible. We must pay close attention to our growing, harvesting, storing, handling, and shipping to be certain to be certain that the quality of organic products is worth the premium price.

VALUE ADDED OPPORTUNITIES IN ORGANIC GRAIN PRODUCTION

In 1996, we also started a organic feed business, working with NOFA-NY certified farmer, Norm Wigfield. This business supplies feed for the rapidly expanding organic dairy and chicken business in New York and the Northeast. In 2000, we purchased the old Agway Feed Mill in Penn Yan and have converted it into an organic feed mill now called Lakeview Organic Grain. Our mill operation also benefits other area organic grain farmers, since we buy most of the corn, soybeans and small grains we use from New York farmers.

ORGANIC CERTIFICATION

In order to standardize and organize the organic approach to farming, certification agencies have been formed for the purpose of overseeing the production of crops, livestock, milk and other farm products that are grown under certain fairly stringent rules or 'Organic Standards'. Farm products can <u>only</u> be marketed as 'certified organic' when they are grown in accordance with these Standards and under the inspection of one of the recognized certifying organizations. There are ove 10 certification agencies that certify farmers in New York. With the beginning of the USDA National Organic Program in 2002, the 'Standards' used by all US certification agencies are basically the same, though how the Standards are administered does differ somewhat between the groups.

In order to see the true cost and profit of farming and as part of our certification requirements, we maintain detailed records of all inputs, including all purchased inputs, time and labor, and all harvest, storage and sales data. As certified organic farmers, we must show the organic inspector these records at each annual inspection. These records can also help us to see where we are making money, where the cost of our inputs exceeds our profits, what we must do to be productive and profitable.

BUILDING THE ORGANIC COMMUNITY

Through our experiences with other organic farmers, we have become thoroughly convinced that building



and sustaining a sense of community and cooperation is essential for organic success. In the organic farming community, we must recognize and carefully nurture a different paradigm of cooperation amongst farmers, actively practicing the concept that 'we all do better when we all do better'. We need to work together to better understand organic farming principles and to improve the overall quality of organic crops and food.

Organic farming is a viable and productive approach for both small-scale

and large-scale farmers today! It takes a different approach, a different way of thinking, but it isn't that difficult. Working together, organic farmers can make significant and positive change in American agriculture today!