A Harvest Thanksgiving

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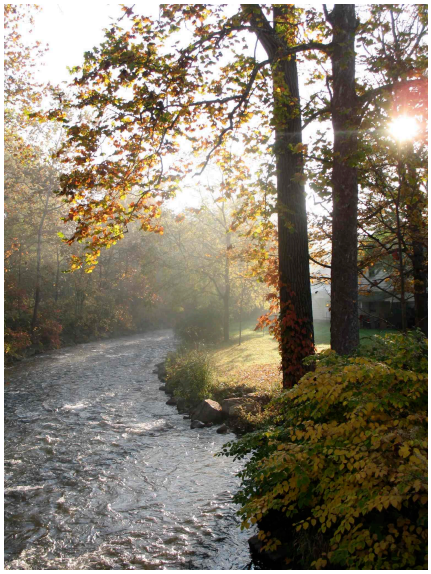
The brilliance of October is rapidly fading to the damp faded ochre of November. Most of the time, skies are heavy and gray, and night comes early. We are nearly done harvesting our corn. Yields aren't great, but its good to see the crop get harvested. The combine has predictably broken at inconvenient intervals. Why is it that combines never break during the rest of the year when we don't need them so critically? Slowly we are chugging through the harvest and soon the 2002 crop will be all safely stowed away in the grain bins.



For farmers in many parts of the United States, this season has been a difficult one, plagued with too much rain in the spring, followed by a profound drought through the summer. For many New York farmers, this is the fourth year in a row that their region has been declared a Federal Agricultural Disaster Area. And to be honest, this is getting just a little bit old! Organic farmers have fared a little better during this drought because the higher organic matter levels in our soils tend to hold water for weeks past when conventional crops were showing drought stress, but eventually even our resilient organic soils run out of water and the crops suffer.

The approach of Thanksgiving brings to mind harvest celebrations which are deeply ingrained in our cultural traditions but increasingly have little real meaning to the vast majority of the population. Indeed, we farmers may have a rather rare perspective on celebrating this harvest holiday. We know there is far more to Thanksgiving than a groaning table of rich food. We know that the abundance of our harvest is not something that we can ever take for granted. So many things that are completely out of our control can and often will go wrong. But when November comes and our crop is safely stored away or sold in good condition, we know this indeed is something to be deeply thankful for.

I recall one romantic Thanksgiving back when we were first married. We took a break briefly for the family dinner, but the rest of the day I handed wrenches and repair parts to Klaas who was somewhere under our aging combine, and retrieved dropped bolts and tools from the icy water in the furrows. By that evening, the combine was going again and we harvested the field, the big machine swaying and roaring like a huge ship, gliding across the sea of darkened corn, the dust, corn husks and snow flurries blowing past in the powerful headlights. As we watched the corn surge out of the auger into the wagon, we truly felt thanksgiving for this abundance.

As we harvest, we must be very conscious of that we are handling yet another fragile commodity - quality. Studies show that most consumers who buy organic products do so because they believe it is higher quality. It is imperative therefore for organic farmers to focus on producing and maintaining high quality products.

Certainly grain crops, such as wheat, corn and soybeans, are less fragile than many of the crops that organic farmers handle. But this doesn't mean we can be careless! Grains must be harvested with properly adjusted

equipment, handled gently to prevent post-harvest damage, cleaned if necessary to remove excess weeds and other foreign material, and dried to an appropriate moisture level for safe storage. Storage facilities and transport equipment should be clean, tight and properly prepared. Each type of grain has unique harvest, handling and storage requirements that must be taken into account. If you intend to store grains for longer than 6 months, corn should go into the bin at no more than 14% moisture, wheat should be at 13%, and soybeans should be at 12%.

The first years we grew dark red kidney beans were a real learning experience. If ever there was a finicky crop, kidney beans are that! Growing them is the easy part. It is the harvest, handling and storage that can quickly turn bright attractive beans into sheer garbage. If beans are too wet, they will mold and bloat. If they are too dry, they will crack. If they are banged around or dropped, they will crack or the skins will develop small nicks, or 'checks', that will cause the beans to burst when they are canned. We learned quickly that if we wanted to grow acceptable organic kidney beans, we needed to invest in an extensive line of specialized equipment, a bean puller, windrower, a special combine, a flat-bed dryer and even a beltveyor. Has it been worth the trouble? Organic kidney beans are a high value crop, our buyers will pay well if the beans are of sufficient quality. If we want to expect that premium price for the product, we have to be willing to make the investment of equipment, time and extra care to produce the required quality. Most years, the rewards for working hard to produce a high quality product will pay off well.

Harvest time also gives us an opportunity to consider the past season and start making plans for next year. Planning crop rotations is something that organic farmers must take seriously. Within 24 hours after our

kidney beans and soybeans are harvested, the fields are disked lightly and planted to a small grain, usually spelt, wheat, triticale or winter barley. These fields will be frost-seeded with medium red clover in February or March. Small grains are useful in a field crop rotation to break weed and pest cycles, to loosen the ground, to add significant amounts of organic matter, especially if the straw isn't harvested, to provide soil cover over the winter, and to allow the establishment of a high-biomass-producing cover crop, like the clover. The clover is our primary source of nitrogen for the rest of the 3-4 year rotation. Unfortunately, this year our soybeans have been slow drying down and it is getting pretty late to be planting small grains on the last few fields we are just now harvesting. We don't like leaving fields bare over the winter, but we may have to on some fields, and plant them to spring barley or oats next year.

In the recent past, some certifiers have been very specific about what they consider an appropriate organic crop rotation, but National Organic Program is actually rather vague on this. NOP Section 205.205 states that a producer must use appropriate crop rotations to (1) maintain or improve soil organic matter content, (2) provide for pest management in annual and perennial crops, (3) manage deficient or excess plant nutrients, and (4) provide erosion control. While certainly organic farmers should be doing all of that, we expect that certifiers and inspectors are struggling to develop consistent criteria that fairly judge whether all their diverse farmers have adequately met these rather vague requirements in 2002.

Organic farmers need to consider what their own goals for crop rotation are, both agronomic and economic, and then plan a whole farm, multi-year rotation that will meet these goals. We also need to be flexible, because even the best made plans can go awry. The rain just wouldn't quit this spring until late June, too late to plant spring small grains, corn and even soybeans on many fields where we had intended to. As we scrambled to first find shorter season corn, then return those bags and find more soybean seed, and then

scrap that plan, it became harder and harder to keep to our intended crop rotation plans. And then it stopped raining completely . . . for months! Unfortunately this wasn't the first time in recent years that we've had to go through this rotational scramble. Sometimes it seems like we'll never have a 'normal' year again, and that makes planning crop rotations much more difficult. However, we need to understand the goals we are trying the achieve with crop rotation, and then try to choose crops that best fit those goals and match the weather.

'No till' seems to be the 'golden boy' of American agriculture these days. Excessive tillage certainly can result in soil erosion, breakdown of soil structure, a shift in microbial activity, loss of organic matter, and it uses considerable amounts of fuel and tractor time. However, this does not mean we must go out and invest in massive quantities of Roundup! Sometimes it seems that the current popular infatuation with no-till often amounts to little more than an institutionalized support of increased Roundup sales. Not all soils, not all crops, and not all farms are well suited to no-till.

Organic farmers should incorporate reduced tillage practices into their techniques, but we prefer to use techniques that use a 'bio-till' rather than a 'no till' approach, letting an established live crop prepare the soil for planting the following crop. We had success broadcasting spelt into soybeans in September, just as the soybean leaves are turning yellow and starting to fall. The fallen leaves provide protection for the germinating spelt seedlings. One other technique we plan to try is used by farmers in the Red River Valley of Minnesota and North Dakota. They are planting rye as a cover crop in the fall. When the rye is almost heading in the spring, they mow it close to the ground and then no-till soybeans into the stubble. The decomposing rye straw provides weed suppression, nutrients, organic matter and erosion control for the new crop.

There are many creative ways that organic farmers can incorporate reduced tillage into their operations but we should not feel guilty about occasional plowing. Mixing the soil will redistribute nutrients and make them available to crop plants. The introduction of air into the soil is also important, especially in an organic system that relies on microbial activity to provide soil fertility. With the introduction of new oxygen, the soil microbes are able to digest soil organic matter, to convert it into stable humus, and to reproduce, releasing readily plant-available nutrients into the soil solution which our crops will use. While some soil organisms may be harmed by the physical action of plowing, for many species and for plant roots, this breath of fresh air is just what they've been waiting for. To organic farmers, the most important value of soil organic matter is in the using of it as a source of fertility, and our friends, the microbes and worms, need oxygen to do that. We took the children on a 'Sunday afternoon adventure' one warm day last spring to recently plowed field and spent over an hour breaking open lumps and looking at earthworms of all sizes, their tunnels and their eggs. The plowing didn't seem to have damaged that earthworm population. The ground was perforated with fresh earthworm holes which so needed for good water infiltration and root penetration. Something we're doing was working well!

Tonight, I went out to feed the sheep after dark. Inevitably, the sheep are taking lower priority these days now that the other animals we raised during the summer, the pigs and chickens, are safely tucked away into the basement freezer. The wind was sharp and the water made my hands ache and sting. As I stood there waiting for the water tank to fill and watching the sheep, I was reminded of an article, printed several years ago in the Mennonite magazine, Family Life, in which a young mother considered the privilege of having her hands in warm, soapy dishwater while watching the snow and bitter wind whip past her kitchen window. She did not dwell on the piles of dirty dishes, the other chores left undone, or the demanding children at her feet. Instead, she appreciated the simple pleasure of warm hands and a warm home.

The windows in the house glowed through the night as I walked back from the barn. Just waiting inside was warmth and light, the smell of good homegrown food cooking in the oven, the relentless 'Mom-ing' which would resume as soon as I opened the door. It was a privilege to be out in the cold silent winter night alone, and it was a privilege to come inside.

As harvest finishes, many of us are facing grain bins and checkbooks that are not as full as we had anticipated when we planted those seeds so hopefully last spring. It has been yet another tough year for farmers. Yet despite that, it is still a privilege, shared by an increasingly smaller number, to harvest our own crops and to see and touch the tangible completion of the year, of our hard work and our skill. As Thanksgiving comes, it is a privilege to understand the deep urgency and relief expressed in the hymn, "all is safely gathered in, ere the winter storms begin.' It is a privilege to know that, God willing, we will be back in our fields next spring, planting our seeds and again firmly believing in the abundance of the harvest to come.

Happy Thanksgiving! We wish you a rich and abundant harvest of family, friends, and love.