The “Brines Farm” Hoophouse Story

By Shannon Brines

Growing, preparing, and enjoying wholesome foods has been a passion of mine all my life. It was fostered early as a child when I helped grow, harvest, prepare, and preserve maple syrup, numerous fruits, and a wide variety of vegetables. There were certainly positive economic and health implications for our family in doing so but most of all I fondly remember the fun and great tasting food we enjoyed. This passion has only grown deeper as I continue to evaluate priorities and goals in my life.

As I began my professional career “sustainability” and “globalization” were emerging as topics of extreme importance. At about the same time other realizations began to take hold in me. During my lifetime I have watched the ever mounting suburban sprawl pressure continue to transition the once rural agriculture community that was my hometown. I began to wonder about the continued loss of agriculture and the impact on the regional food system from the continued exodus of farmers (including the farmer I worked for as a youth). The more I thought about these ideas the more I realized the most intriguing areas in which I could envision sustainability were the areas of agriculture and food. I began incorporating these areas into my professional career as much as possible. Additionally, I began attending and participating in lectures, conferences, and local meetings. I became a local food system and wholesome food advocate and educator whenever possible.

Not satisfied with this alone, and interested in experiencing a more tangible part of a sustainable food system, I decided to officially establish Brines Farm: a small produce operation on the land where I was raised. By far the most valuable and energizing part of all this experience has been the interaction with the different people and networks working toward sustainable food goals: from the local leaders, fellow farmers, NGOs, and business entrepreneurs, to the consumers. The response has been extraordinary and has given me nothing but sheer optimism. I can say firsthand that there is a genuine and growing hunger for local, wholesome, slow and sustainable food. It is also clear to me without a doubt that I would like to use my skills and energy to contribute to this continued inspiration of people – as many people as possible - towards awareness, appreciation, and support of these foods and a more sustainable food system which produces them.
The site of Brines Farm has been the 10 acre homestead of the Brines Family for nearly 30 years. My parents Bill and Marlene, who still reside there, raised 4 sons and a daughter there - Sean, Scott, Shannon, Shane, and Sondra. While the homestead certainly doesn’t fit the stereotypical “farm with a red barn” image, principles of permaculture have been employed fairly extensively. The forested portion closest to the road include hundreds of maple trees which are tapped for their sap. Blueberry, raspberry, and wild raspberry bushes are close to the house as well as a kitchen garden and small orchard. Wild grapes and wild blackberries are among the oak and pine forests near the hoophouse and field site.

My main interest and current focus is to provide local, fresh and nutritious food year-round, even during the winter, and to do that primarily using energy supplied naturally by the sun. Having practiced some basic season extension techniques and studied additional techniques via workshops and literature, I began building hoophouse #1 in the fall of 2004 with extensive help from my parents, siblings, and friends. It has a “gothic” steel frame that is 30’ by 96’ and is covered with 2 layers of greenhouse film. For this hoophouse I used the highest regarded supplies that I discovered during my research. The steel frame is from Ledgewood Farm (Moultonboro, NH). The film is “Ginegar Sun Selector” brand which has some of the highest light transmission and heat retention properties on the market and was purchased from Growers Requistes Limited (Ontario, Canada). There is insulation buried into the ground, extending from the untreated lumber portion of the structure. All of those materials for the main structure were approximately $8000 (although steel and plastic prices have risen since then). A very small AC fan blows air between the 2 layers of film for added insulation during the coldest months (I’ve experimented with a small DC fan run by a small solar PV panel). I am currently planning hoophouse #2 which will utilize more local (and actually cheaper) materials: an A-frame structure made from black locust trees on site, local ash lumber, and other natural building techniques.

The key to growing food that can be harvested year-round is to work with the seasons and utilize cold hardy/tolerant plants, particularly for the winter season. My parents and I have tried with success various lettuce, spinach, arugula, claytonia, mache, carrots, leeks, cress, tatsoi, pac choi, mizuna, and kale to name a few. These are all planted from August to November directly into a healthy compost soil. We use absolutely no insectides, pesticides, herbicides, or synthetic or petroleum-based chemicals. We follow a plant positive “authentic” farming approach which includes the use of companion planting and beneficial insect encouragement. From fall through spring everything is watered by hand using watering cans. As overnight temperatures approach freezing a floating row cover is suspended about a foot above the plants using 12gauge wire to “tuck the plants in.” The row cover is rolled back on sunny days but otherwise remains in place during the coldest periods. On particular sunny days doors and vents can be opened (by hand) to ventilate. Overall, the hoophouse structure combined with the floating row cover provide our plants with an environment roughly analogous to the outdoor climate zone in parts of states like Virginia, North Carolina, Kentuckky, and Tennessee. The temperature can fall below freezing under the floating row cover but because the plants are cold hardy and out of the direct elements and wind they handle it just fine as long we are a bit careful about the timing of watering.

Response to our year-round produce has been tremendous. I think our hoophouse has demonstrated the viability of such a small business and I envision a network of small hoophouse farmers across the state providing Michiganders with healthy, fresh produce even during our coldest months. We ourselves are currently considering expansion on the existing site as well as onto over 100 acres owned by my parents in Lenawee County. Thank you for your interest and patronage. If you have any questions at all about any aspect of our operation or sustainable agriculture, please don’t hesitate to ask.

Some Resources:

Brines Farm website and blog.  http://brines.org  Feel free to contact me with further questions or your own ideas.  shannon@brines.org

Any literature or workshops by Steve Moore. Steve Moore and his wife, Carol, are the founders of Harmony Essentials, an organization dedicated to the vision and practices of a sustaining food system. Steve is also the farmer at Sonnewald Natural Foods in Spring Grove, Pa. The Moore’s can be reached at 1522 Lefever Ln., Spring Grove PA 17362; (717) 225-2489.

Professor John Biernbaum and the MSU Student Organic Farm – literature, workshops, and academic certificate program. http://www.msuorganicfarm.com/
