

## Seasonal High Tunnels: A Year-Round Classroom



**North Hampton, New Hampshire** - Located in the New Hampshire seacoast town of North Hampton, the land that is home to **Moor Farm** has been a working farm since 1729. Dick Wollmar's family acquired the property in 1976, and he has been living out his commitment to sustainable agricultural practices, energy independence, and a viable farming future ever since. Using organic practices, the farm operates under the guiding philosophy "to continue and improve on sustainable methods of agriculture and to harness emerging technology in alternative sources of energy as petroleum derived fuels dwindle for dual reasons of short supply and effect on global warming."

*"Our entire farm of about sixty acres is in permanent conservation easements in order to be available for future generations."*

In the nearly 35 years of farming, Mr. Wollmar is proud to say that they do not use insecticides, herbicides, or manufactured fertilizer on the 58-acre property. Instead, they use a seaweed/fish emulsion as a foliar spray. Compost, wood ash, and cover crops are used to enhance soil health. The farm uses a trickle irrigation system, with the primary water source being a spring, which is moved using a

solar cell pump and incorporates a rain barrel to capture roof runoff.

If you visit the farm, you will find certified, naturally grown field crops, berries, pigs, lambs, approximately 50 chickens, one cow, and one heifer. You will also see a structure often used by perennial growers - the seasonal high tunnel. Dick Wollmar is a veteran to high tunnels as he has

been growing tomatoes in them for over 30 years. Mr. Wollmar has two high tunnels that shelter approximately 1,000 square feet of land. One of the tunnels was designated for a tomato crop, while other was used for spinach, eggplant, heritage peppers, and experimental rotations.

In September 2010, with financial assistance from the **Environmental Quality Incentives Program (EQIP)**, Mr. Wollmar worked with Kim McCabe, Soil Conservationist, to install a 2,000 square foot high tunnel. He said that installation took about 100 man hours, including the subsoiling work. As soon as installation was complete, vegetable plantings immediately began inside the frame. Now, just over one year old, the high tunnel has proven to successfully produce kale, beets, and 12 varieties of lettuce and salad greens.

*"This is the best program I've seen yet", says Dick Wollmar when describing his experience with the USDA-NRCS's Seasonal High Tunnel Pilot program.*

He attributes most of the efforts in the new high tunnel to Pollyanna Ford, who lives in an adjacent farmhouse and works with Dick Wollmar on the Moor Farm. The farm used to operate a 100-member **Community-Supported Agriculture (CSA)**; however, it was closed as the demands became overwhelming. The farm had the space for an individual or a family that could help with the daily operations and production. Pollyanna, who is a new and upcoming farmer, saw the importance of learning how to grow food for her family and community. Prior to moving to Moor Farm, Pollyanna ran her own flower and estate gardening business. While she notes the tireless work required of farmers, she comments that working in the high tunnel is physically less strenuous than the gardening work to which she was accustomed.



**A New and Beginning Farmer.** A little over one year ago, Pollyanna and her family moved to the adjacent farm house on the Moor Farm and she became the unofficial farm co-operator, with her primary duty to run the new seasonal high tunnel. With the beds prepared by late August 2010, she began planting in the new high tunnel and has not stopped since.

In talking about her transition to farming, Pollyanna emphasizes the hard work, dedication, and the huge learning curve required to farm, especially using 100 percent organic practices. It would not have been possible, she emphasizes, without supportive members of their farming community and Dick Wollmar. She remarks at the extended length of the growing season the tunnel provides, as plants were growing through the first week of January 2011, and new plants were successfully planted in mid-February. Already looking ahead on ways to improve the system, Pollyanna says she plans to shorten that time window between harvest and planting this coming winter. Both she and Mr. Wollmar anticipate that the recently-installed wood stove will assist in shortening the gap.

A challenge that persists is the **flea beetle**, which has attacked many of the salad greens. In an effort to eradicate the pest, they have tried flame treatment and may plant radishes around the perimeter next season (the flea beetle is reportedly attracted to radishes and will feed on them, instead of the valuable salad greens).

Though sometimes frustrated with the challenges presented in her first year, Pollyanna is undaunted. In response to a number of farm patrons and friends expressing interest in buying meat from Moor Farm, she is planning to increase the current turkey and pig population next year. The decision was simple: Patrons said they wanted a turkey or pig, but lacked the land and skill to raise one. Moor Farm has the skill, time, and infrastructure needed. This “win-win” arrangement has already generated interest for the following year.

Planting for a mesclun mix in the high tunnel is on a 21-day rotation. Moor



*Demonstration of the how to flame-treat greens to counteract the flea beetle.*

Farm also uses a 28-day rotation for their market mix. Prior to the 2010 high tunnel, Moor Farm's direct-to-market products were largely eggs, honey, flour (produced from grain grown on the farm), onions, potatoes, and squash. Mr. Wollmar reports that the new high tunnel has significantly boosted the farm's market volume, especially during the winter. He speaks very positively about the season

extension and resulting marketing opportunities. Moor Farm is currently supplying some seacoast farmers markets and restaurants, with 99 percent of the vegetables going to market. Visitors are also welcome to stop in for their supply of eggs and vegetables.

#### You can find Moor Farm's Products at:

-  The Rye Farmers Market
-  The Exeter Farmers Market (*winter*)
-  The Epoch Restaurant in Exeter
-  The Green Monkey in Portsmouth
-  The Wentworth By the Sea Hotel in Portsmouth

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**From a Seasoned Farmer.** Over the past 30 years, as Dick Wollmar continued employing sustainable practices, he witnessed several key changes. The first was increased organic matter on the property, which in turn improved soil health. Second was the undeniable shift in the public's attitude towards local food, as evidenced in the more mainstream movies such as *Food, Inc.* and *Fresh*. As a founding member of the Portsmouth Farmers Market 35 years ago, Mr. Wollmar still enjoys going to the markets for the social connections and is heartened to see the markets' growth. He is a member of the North Hampton Agricultural Commission and continues to generously offer his time and experience to new farmers and individuals simply interested in learning about sustainable agriculture.

Farming is a high risk and sometimes low-yield profession. What has kept him going for 35 years? Mr. Wollmar's reply, "... a zest for life and to be a steward for God's land as long as I live. I have a good reason for getting up early every day and have been blessed with good health. Is there more?"

When asked about advice he might give the younger generation, he says, "Chasing money is not the answer, but being at peace with God and nature is what farming offers. Animals, as the biodynamic people advocate should be part of the equation..." Mr. Wollmar also credits, Mary Lou, his wife of 57, years as a major factor in the equation.

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**For more information on Moor Farm, visit:**

Moor Farm: <http://www.moorfarm.org/index.htm>

New Hampshire NRCS: <http://www.nh.nrcs.usda.gov/>

Seasonal High Tunnel Link: <http://www.nh.nrcs.usda.gov/features/High%20Tunnels.html>

New Hampshire Farmer's Markets Association: <http://www.nhfma.org/>