

## WINTER GREEN PILOT PROJECT SUMMARY MAY 14, 2009

Winter Green recently completed its Pilot Project at The Community School in Swannanoa, North Carolina, where we had opportunity to study the feasibility of growing winter vegetables in a hoop house.

We are grateful to Casey McKissick, the agricultural instructor who made it possible for us to grow in an already existing, but unused hoop house. We gathered together a team comprised of Mike Adams, Project Manger and an apprentice, Delario Cato. Joan Engelhardt and I created Winter Green as a North Carolina non-profit organization in collaboration with Asheville Green Works, our fiscal sponsor and with Asheville Green Opportunities who found a green job apprentice.

This project didn't just come out of the blue. We researched other winter growers whose research showed us that this is not only possible but important to do at this time. Eliot Coleman is a recognized pioneer with growing in Maine winters. And he relies on the history of European vegetable growers who have supplied markets in France for centuries. Eliot has recently published The Winter Harvest Handbook, a valuable resource for many aspects of winter growing. Our research also found winter growing in Canada, Minneapolis at Growing Power Farm and in Kentucky at the Au Naturel Farm, with their book, Growing 52 Weeks of the Year. We surmised that if those people could do it, so could we learn from their efforts and writings. Eliot in particular has left a great trail of his experiments, thoughts and growing. We would begin our trial.

In the fall of 2008 we bought tools, equipment and seeds and got started. What we learned exceeded our half joking expectations for a couple of salads. We grew many pounds of arugula, chard, kale, spinach, collards, lettuces, carrots and cilantro, that often tasted better than seasonal varieties. Winter growing engenders more flavor and sweetness and higher nutritional value due to surviving in cool conditions.

We began by planning and ordering our vegetable seeds. Our site was rugged with a huge hole in the plastic covering the hoop house. Cold wind blew inside and out. Plastic end and side walls flapped in the November wind. We patched the ceiling hole and closed up and secured the end walls and sides. The closed in hoop house immediately felt better - warmer, more contained, manageable. That thin film of plastic separating us from the cold outside created a strange sense of illusionary protection. Yet it was enough to do wonders, and led us to the sense that yes, we could attempt this. The soil was good, needing few amendments and compost. We could give it a try.

On December 4, moving into the coldest and darkest time of the year, we planted seeds. Eternal optimists we were, and so were the seeds, because they sprouted in four days, and

continued to grow well. Of course once we had patched the structure, prepared the beds, added drip hoses and planted seeds in the school's greenhouse, our crew had little work. In late December we were scrambling around for jobs to keep our worker busy.

In January we transplanted our December babies, and then direct seeded lettuce, spinach, kale, chard, carrots and beets on January 9. These sprouted January 30 and grew slowly in the cool conditions. Transplants grew well. We covered crops with an inner spun fabric to give them an extra micro-climate.

Observation became crucial as moist conditions and succulent plants offered aphids and white flies great opportunity. We sprayed soap solution, watched, pulled out old crops lingering from summer and flamed the area to rid the whiteflies. We noticed that chard and special greens grew slowly on the north sides near the edge. The middle row was vibrant and significantly larger. We learned to regulate the heat buildup, which is significant. Oddly it is the most important to watch for even in the coldest parts of the winter. The sun heats up the hoop house quickly, and that heat must be dissipated, by rolling up the plastic sides. Sometimes the temperature in early February would rise to 86 degrees under the Remy layer. Even so the crops looked great, and were getting big, near to harvest.

On February 23 we had our first harvest, late by few weeks because of ?. We picked about 30 bags of produce! We got our couple of salads. Our harvests every couple of weeks continued to grow, with regularly picking around twenty-five pounds of vegetables. We sold to West End Bakery in West Asheville, a health food store in Black Mountain, The West Asheville Tailgate market, and contributed to the food bank. Feedback confirmed our observations. The produce was extraordinary and recipients were excited.

Food choices make a difference, to the local economy and to our health and pleasure. Studies note the amount of money that goes out of the community when we habitually buy our food from far away. Buying winter vegetables from a local grower keeps that money spent in our community. Recent nutritional studies highlight the extra advantage with vegetables that have had to grow in cooler conditions. They are packed with high amounts of antioxidants that strengthen our immune systems. Finally, food picked recently and close to home tastes exquisitely better. Choosing local benefits us in many ways.

Our Pilot project is over now. It was very successful in proving that high quality vegetables can grow in winter in NC. Even though there are many nuances to the growing we can do this, and teach others. We can become more self-sufficient with our food, as we enjoyably prepare for an uncertain future. This project has shown us that Winter Green can introduce local winter growing to neighborhoods and educate people about the value of continuing to have local foods.