



## Farm Food Safety Plan, 2015

### **General Statement:**

We are working on Eastview Farm to cultivate the highest quality of produce that we can. We are motivated to grow superior vegetables which will reflect our goals for excellence in taste, high nutritional values, appearance, and sustainable organic farming practices. We approach our farming with a systems mentality. We feed and tend the soil and the animals and the plants we grow and they in return nourish us in a myriad of ways that are hard to define and measure. The health of the land and the quality of life of our animals and plants are important to us. Healthy soils grow healthy food which in turn grows healthy bodies and minds.

We cultivate and sell what the soils on our East Hardwick hillside farm are best at growing: garlic, greens, onions, herbs and squashes. We use proper composting methods with our own diverse farm animal manures which include poultry, goats, horses and cattle. We take yearly soil tests. We are working to replenish our rich clay and loam soils using rock powders and minerals to address deficiencies. We consistently monitor our supply of fresh clear well water to grow and rinse produce. We triple rinse salad greens, kales, collards and chard and keep our other produce and herbs clean and stored in temperature monitored areas in our barn and root cellar. We keep our harvest and storage containers and refrigeration units clean and organize to insure that our produce quality is the best we can make it.

Following is an outline of specific practices as they relate to food safety for our farm.

### **Cultivating Produce:**

We are a small diversified farm. The crops that we tend are designed to be grown and harvested at different times over three seasons here in Northern Vermont. We grow greens in the cool spring and fall months and garlic and storage crops in the hot summers. We fill our root cellar and storage room for the long cold winter and offer exceptional produce to others. Quality is a primary goal on Eastview Farm not high volume and quantity. This allows us to manage our nutritious crops in a way that makes sense with our busy lives. We strive to farm with a minimum of inputs and intentionally plan the times that we are producing vegetables, garlic and greens to best utilize the seasons and our human resources. We use low depth rotor tillage for our growing beds then use a bed former to make raised beds for our crops to maximize our yields. We seed strips of permanent pasture grass between our raised wide beds to minimize open soil and water usage and maximize and increase soil biology. We are working to make permanent raised beds for some perennial crops like lovage, rhubarb and asparagus.

We mulch our garlic and field vegetables with straw and hay and poplar wood shavings left over from Sylvacurl's manufacturing process, (see [www.sylvacurl.com](http://www.sylvacurl.com)). We plan crop rotations

and green manure cropping to revitalize and replenish soils in a systematic way. We rotate our garlic crop yearly and graze the land in years between the crop in a four year rotation to minimize pests and soil depletion and continually give back nutrients to the soils that grow our food.

### **Land History:**

There is no known safety risk for past use of our land. We have used organic farming practices since moving here in 1989 and our farm has been certified organic through NOFA Vermont since 2012. We cultivate approximately two acres of land between the fields, gardens and tunnels. The majority of our greens are grown in the spring and fall in an unheated high tunnel.

### **Soil Fertility:**

We use manure from on farm sources, add Sylvacurl , packaging sawdust and curls, for a carbon source, hay, plants and vegetable scraps and weeds and some occasional brush to our compost piles. We turn and move piles over a 2- 3 year period in a process that we feel works best using NOFA guidelines. Currently we are not keeping temperature records but we do not use compost under 2 years old in our growing practice. We apply composted manures to fields, tunnels and gardens in the timelines that are required in the NOFA guidelines.

We add minerals and amendments based on soil test results following recommended guidelines from the Bionutrient Food Association,([bionutrient.org](http://bionutrient.org) .) Livestock are fenced out of growing areas. They are grazed around cropping areas.

### **Irrigation:**

We have a well that we test regularly for E coli and nitrates. This is what we use for watering in the tunnel, some field growing and our animals. We hand water, use soaker hoses, sprinklers and some drip irrigation. We use the same water source for washing produce. We work directly with Natural Resource Conservation Service and the Department of Agriculture in water quality testing.

### **Crop Damage and Contamination in the Field**

The fields that we use for growing and the tunnels have wire fencing and/or electric fencing to keep animals out. Poultry is kept in a fenced yard or out of any areas that are growing food. There are buffers between the animal pasture and a slope in the field areas. We plan our rows to minimize any water flow from pasture to crop areas and to hold rainfall in strips between raised beds for crops.

## **Harvesting Produce:**

By keeping produce clean and cool during harvest we minimize food safety risks. We wash our hands before harvesting and use grass strips between cultivated rows to control erosion and dirt contamination of vegetables. In the tunnel, I water the greens before harvesting then rinse in sinks and spin dry. We use straw mulch on the garlic crop. Squash and alliums are harvested and laid on grass strips then picked up and brought to the barn in clean crates. They are cured in a sunny location or airy shaded location as appropriate to the crop.

## **Produce Temperature:**

We don't leave harvested garlic or produce in the field very long. If need be on a hot day I set up a moveable tent for shade until I can load the truck and get it to the cool room in the barn or a refrigerator. I have not been growing greens for market in the summer months. I have intentionally designed my farm practices around the seasons to minimize the need for refrigeration in hot weather and to make the best use of our storage.

## **Harvest Containers:**

We use plastic containers for cutting greens that are marked for harvest. I clean and dry plastic trugg harvest containers between use. I wash them with soap and water after harvesting and spray rinse them again before harvesting.

We use plastic crates for harvesting garlic which are washed and rinsed as needed. Clean crates are stacked on shelves the containers (truggs) are hung up to dry or dried before stacking. Harvested garlic is hung up in the barn rafters and cut down once cured into crates or boxes, then sorted and cleaned by hand with a dry brush. We also use drying racks for some of our garlic curing which are clean and maintained. We do not have problems with nesting or roosting birds above hanging garlic in the barn.

## **Shed Design:**

I do not have a separate facility for a washing shed instead we utilize a portion of our high tunnel and a cool room in our barn. To minimize food safety risks we use this area in the high tunnel we rinse and/or dunk produce multiple times with cold potable water from our well. We have a U shaped table system for washing and packing that I cover with ridged plastic sheeting. I put watered produce that has been sprayed before harvesting on one side, wash and/or dunk in a two bowl sink, spin dry, then pack produce in bags or boxes in a specific sequence. The greens are taken to the refrigerator immediately as they are cut, washed and packed. The water for washing is changed as it gets dirty. We have paid particular attention to providing clean greens to our customers. This limits the amount of greens that can be harvested and washed at any one time but it works well. The cleanliness of the produce has been commented on by several customers as being highly appreciated.

## **Produce Cooling:**

I have not been harvesting greens or vegetables from the field for sale in the summer months when it is hot mostly because I don't have the washing and cooling systems in place. Garlic

plants are harvested early in the morning or late in the afternoon in July then taken to the high drive for hanging, air drying and curing in the barn.

### **Rinsing/dunking produce**

We use water from our well for washing produce that is for sale. I fill and refill sinks with cold water add the lettuce and/or greens to one sink, transfer them and rinse a second and a third time if needed before spinning and bagging. I change water as often as needed for it to remain clean and cold. We rinse squash in a food safe chlorine bleach solution before storing.

### **Cleaning Routine:**

I clean the wash area before and after use. Clean crates and containers are stored to dry off of the ground. Periodically I clean with biodegradable soaps. There is a sign posted which outlines cleaning procedures for anyone that is working in the washing and packing area which currently is in a corner of the high tunnel.

### **Storage Conditions:**

We are using refrigerators for storage of greens. I use a combination thermometer / hydrometer to monitor squash and allium storage areas which have agricultural board on the walls and a cement floor with a drain in the barn and shelving in the root cellar in the house. I check temperature and humidity every other day or daily as needed. Washed crops are stored on shelves off the floor.

Leafy crops are stored for short periods of time usually less than seventy two hours. Garlic is stored in net bags a root cellar in the house. The range in the root cellar is 45-50 degrees. Winter squashes and onions are stored in a room lined with agricultural board and a cement floor with a drain in the barn. The temperature range in the barn room is between 40-50 degrees.

### **Inventory Management:**

We are a small farm enterprise. Inventory management is ongoing. It is done as part of our routine checks for spoilage.

### **Storage Cleaning and Maintenance:**

We do periodic cleaning and seasonal deep cleaning spring and fall in our storage, barn and tunnels.

### **Harvest Tracking:**

I have been making a hand or Quickbook invoice for most delivered wholesale produce. I have not been using a lot number with a date on the invoices due to the size of the orders and the volume of our production.

## **Produce Labeling and Farm branding:**

I have been labeling boxes with the name of the farm and reusing them. If I use them for greens I use box liners. If boxes are being reused for squash I wash them and rinse them. I have also delivered some produce locally in plastic reusable totes that are labeled with the farm name and address. I keep harvest notes with dates and yields and can match them to customer's orders. I do not have printed labels at this time. Garlic and onions are stored in net bags and labelled by variety until sold. Garlic that is shipped for seed or culinary use is packed in dried wood shavings (Sylvacurl) in new boxes.

## **Employee Training:**

I have a couple of friends and family members that help out on the farm during busy times. I work directly with anyone helping and train or guide them as needed to follow the expectations and guidelines that we have in place. I ask that each person wash their hands and tie back their hair when they handle produce. Hand washing and produce washing guidelines are posted.

## **Hygiene facilities and Practices:**

The restroom is in the house. It is easily accessed from the field or tunnels through the back of the house. Everyone on the farm knows where it is located and is free to leave if needed. Breaks are incorporated into the day for bathroom trips and snacks. There is a sink, soap and towels changed daily when in farm use.

## **Minimizing Livestock/Produce Cross Contamination:**

Barn boots must be worn when going through the barn. Different boots are worn for barn chores and high tunnel work. Visitors to the farm can go around the front of the barn to get to the field and tunnel. Clean clothes are encouraged and hand washing is required after animals are touched or before anything is harvested.

## **Health and First Aid:**

I do not have full time employees. I do have one person for part time help on occasion. If she is sick then she stays home or goes home. I have a First Aid kit in the barn and one in the bathroom in the house.

## **Visitor Information, Policies and Facilities:**

I have field trips from the local school visiting the farm. I am currently working on a curriculum with first grade teachers. I have gone in to school to discuss appropriate on farm behaviors and policies before visits to be clear about my expectations and guidelines for visits.

I address expected farm safe behaviors again verbally with children and teachers that visit at the start of any visit. No children are left unattended by an adult on the property. I share printouts that are available with school teachers and students for hand washing and have them posted in the bathroom on the field trip days. I accompany visitors to indicate areas that we are using and areas that are off limits. I recently started work on a farm map to share that information visually in my school to farm curriculum work. No visitors are left in areas unattended with animals, in the barn, or in produce areas without a member of the family being present.

We enjoy sharing our farm with visitors and occasional workshop participants. It is our home, as well as a farm, and we stress the importance of cleanliness, safety, and respectful treatment of animals and the farm property and environment while anyone is here visiting.