

Vegetable Storage for Winter CSA Sales
Tangerini's Farm

Tangerini's Farm is located in Millis, Ma. Located about 25 miles southwest of Boston. We currently have 40 acres under cultivation, a display greenhouse, a propagation house, three high tunnels and a low tunnel. We market through our on-site farm stand, farmers' market, co-op and high-end grocery stores. In 2008, we began our CSA with 100 members and today we have 350 members. Today our CSA options run from mid- April to mid March and almost half of our Main Season members continue with us in the winter months.

We have two different winter options. The first option is the winter share. It runs from early November to the end of December. Pick-ups are every other Saturday from 10a.m. to 1:00p.m.. Distribution is held in our display greenhouse and shareholders take a prescribed amount of each item. The second option is our Combo Share. Shareholders continue to pickup every other week until mid March. Pickups for the Combo are held in one of the cold storage units and shareholders can take up to 25 lbs of winter vegetables. Distribution is held Saturday-Tuesday of pickup week. Both the shares have a u-pick greens option that comes with the share.

In 2010, we constructed a three bay, climate controlled cold storage facility primarily for the storage of winter vegetables for our CSA. We felt strongly that having a good winter share would be determined in large part by our ability to store them correctly.

The concrete unit is built into a hill with insulation on the ceiling and floor. It is separated into 3 bays. Each bay (320 sq.ft.) has its own low velocity-cooling unit. All the units are controlled digitally and all have defrosters.

Unit	Crop	Temp.	Humidity
1	Sweet Potato Butternut Acorn	55 degrees	Low
2	Carrots Beets Parsnips Turnips Winter Radish Rutabaga Cabbage Kohlrabi Celery Root	33 degrees	High- greater than 95%
3	Potatoes Onions	38 degrees	Low-80%

The sweet potatoes and squashes in unit 1 are stored unwashed in bins. In this unit there is also a wall-mounted heater that turns on when the thermostat dictates. The wall that divides this unit 1 and 2 is insulated. Prior to insulating this wall it was difficult to control the temperature and the humidity.

In the middle box we keep all our vegetables that need high humidity and low temperatures. Our carrots, beets, parsnips, winter radish and turnips are all washed and bagged into 15" x 30", 3 mil, vented plastic bags each of which hold about 25 lbs. All the others vegetable in Unit 2 are washed and stored in bins. A wall-mounted electronically controlled mister that sprays a light mist when needed controls the humidity. Data loggers placed in this unit have shown that the temperature remains very constant (31-36 degrees) through the course of the winter even though the outside temperatures ranged from the upper fifties to the single digits.

Unit #3 is for the storage of onions and potatoes. We gradually reduce the temperature to 38 degrees. This year will be the first year we'll store onions under these conditions but, we are hopeful after speaking with other growers who are doing the same This is also the home of our Combo Share. All our available produce is crated and displayed in this room. Shareholders enter the room, check off their names and fill their bags with up to 25 pounds of produce. This display is set up on Saturday morning of pick-up week and dismantled on Tuesday evening. Having it set up like this gives the shareholder much more flexibility, so they don't feel the pressure of getting to pickup when the weather is inclement.

The key to having a good winter share is having good quality, good looking, firm produce. We can't expect our shareholders to support our efforts if we aren't making every effort to bring them the best product possible.