



# ICF Plant Sale

It's time to bring some of the farm's beauty home to your own garden! The ICF greenhouse is bursting with robust plant starts that will help you get a jump on the growing season. We offer a limited selection of our favorite flowers, choice vegetables starts, and vibrant herbs. So come down to the farm and enjoy the sunny days of May!

*Plant Sales take place at the ICF pole barn, three Saturdays in May:*

May 8, 9 am -12 pm

May 15, 9 am- 12 pm

May 22, 9 am- 12 pm



## Pickup Update

We expect the first summer pickups to begin **Monday, June 7** and **Thursday, June 10**. You'll receive confirmation prior to the first pickup. See you soon!



## ICF Hires New Bookkeeper

The Intervale Community Farm is thrilled to welcome Jessie Alberts back to ICF as our part-time bookkeeper and member services coordinator. Jessie worked on the ICF staff from 2005-2007 before

moving to San Francisco. Jessie brings with her a wealth of bookkeeping experience as well as a strong background in sustainable agriculture. Jessie lives in Underhill where she is starting a market garden and CSA.

# Farmers Play Surgeons:

## Grafting Tomatoes for Improved Disease Resistance

by Becky Maden



*Farmer Andy Jones prepares tomato plants for grafting by trimming off and discarding the top of the rootstock plant, leaving behind only the bottom 3 cm of stem.*



*Next, the “scion” (the top portion of the plant) is cut and the leaves are trimmed.*



*The scion and the rootstock are joined together with silicon clips and placed in a dark, humid chamber for several days until the graft is healed. In two to three weeks, the plants will be robust enough to be planted in the hoophouses - and soon enough will produce tasty tomatoes!*

After five years, grafting tomato seedlings has become an annual springtime ritual at the Intervale Community Farm. For many years, ICF has grown 75 % of our tomatoes in unheated structures known as “hoophouses”. Constructed similarly to a greenhouse, our hoophouses consist of a metal frame covered by clear plastic. However, unlike a greenhouse, the hoophouses are unheated and ventilated only by sides that roll up and down to regulate heat and air circulation. There is no electricity or fuel required for a hoophouse, just the initial investment of labor and materials.

Each year, tomatoes are planted into the soil of our six hoophouses. For the first several years, tomato production from the hoophouses was stellar, with uniform, bountiful fruit cascading off of healthy, vigorous plants. However, the very principle of immobile hoophouses that hosted the same crop year after year defies a basic tenant of sustainable farming: crop rotation. After a few years we began to see some diseases affecting the tomato crop. Despite our best efforts at sanitation, we learned our diseases were lingering in the hoophouse soil over the winter and quickly infecting the following year’s crop.

The problems we experienced with our hoophouse tomatoes were not unique to the Intervale Community Farm. In the late 1990’s, vegetable growers all over the state of Vermont were experimenting with greenhouse and hoophouse tomatoes and witnessing a similar pattern - they would have four years of amazing crops before they began to see diseases affecting their crops.

In conventional agriculture, farmers have an arsenal of tools other than crop rotation to handle pests and diseases, including soil sterilization, fumigants, fungicides, and pesticides to combat threats to plant health. Organic growers, however, rely heavily on the benefits of crop rotation to outwit pests and diseases, since most are specific to the host crop. For instance, Colorado Potato Beetles (CPB) only feed on potatoes and their close kin (eggplants and tomatoes). So although the CPB is one of our most dreaded pests, our first line of defense against it is to move all potato family crops as far away from the previous years’ crop as possible.

Since our hoophouses are not easily moved, we looked to alternative means of combatting the tomato disease problems.

Similar to fruit tree production, the most desirable eating varieties happen to be particularly susceptible to diseases that affect the roots. Tomato growers realized that just as apple growers graft a tasty apple onto a vigorous rootstock, a tasty tomato can be grafted onto a disease resistant rootstock.

That all leads us to an overcast morning in April, when we carefully clean off the potting table, lay out sterile clips, razor blades, domes, and a mister bottle. We purposefully neglect to water 2400 young tomato plants with the intent of decreasing the amount of turgor pressure (water pressure in the stem of the tomato plant created by transpiration). A few hours later, we lay out the tomatoes - eighteen flats of 'Maxifort' rootstock and eighteen trays of three fruiting varieties - 'Buffalo', 'Lola', and 'Geronimo'.

The grafting process is surprisingly simple and easy, and at the same time, remarkably daunting. The top of the rootstock is cut off at a 45° angle, a silicon grafting clip is slipped over it, and the scion is cut at the same angle and placed in the clip. The process requires precision and nimble fingers. The entire batch of 1200 plants takes two people nearly two days, and close to 40% of those plants don't survive.

The grafted plants heal in a dark humid environment for several days before light is slowly introduced. After about a week, they can return to normal greenhouse conditions, and soon they begin to flourish. Once they are in the ground of the hoop house, their vigor is unmistakable - the fruit off of the grafted plants is abundant and uniform, with a much longer production period than those that are ungrafted. As this article goes to press, our grafted tomatoes are happily nestled into the warm soil of the hoop houses, their strong roots promising us a delicious season of tomatoes



## Greens Year Round

2009-2010 was a banner winter for spinach harvests. For the first season since the Winter Share began, members enjoyed a bag of spinach for each of the 16 weeks of Winter Share pickups. In the fall, the greenhouse and hoop houses are seeded for the winter share. Metal hoops and row cover offer the spinach additional protection against freezing temperatures. Pictured above are beds of spinach, beneath their floating row covers.

## City Chicks Organic Chickens *Meat Shares*

As in the previous two years, broiler chickens raised on certified organic feed and raised free-range in the Intervale on fresh pasture. Available mid July and at the end of August. Two drop off dates at the Intervale Community Farm CSA. Order as many birds as you like for each drop off date.

Whole birds <3-5> lbs; \$20 each  
Place your order today!

Contact Nicole at 864-3271 or  
[citychicksfarm@gmail.com](mailto:citychicksfarm@gmail.com)



## Administrative Update:

We are very appreciative of the understanding our farm members have shown us with our delayed bookkeeping and administration this spring as we make a difficult transition from our Windows version of bookkeeping software to a Macintosh version. After hours on the phone with help desks around the world, we are working diligently to sort out the glitches. Thank you for your patience - and we'll be back on track very soon!

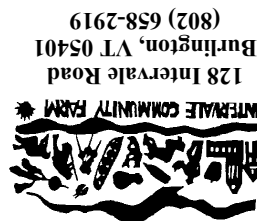


## WANTED FOR THE FARM:



- Clippers for the cut flowers.** We are in constant need of clippers at the farm for our pick-your-own flowers.
- Farm Trucks.** We depend on our farm trucks to get us up and down the bumpy Intervale Road heaped with produce. We are always on the lookout for reliable trucks. If you have a truck that is not quite shiny enough for town, please consider a donation to ICF!
- Garden and Mechanics Tools.** As you go about your spring cleaning, keep ICF in mind as you come upon unused shovels, rakes, wrenches and hammers.
- BAGS!** We need bags year round. Please, only CLEAN, full-sized plastic grocery bags (no produce, newspaper, or other small bags). You can leave them in the big blue bag bins anytime!

Address Service Requested



128 Intervale Road  
Burlington, VT 05401  
(802) 658-2919

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**Editor:** Becky Maden (editor)  
**Photography:** Andy Jones, Becky Maden  
**Graphics:** Bonnie Acker

**Staff:** Dianne Abruzzini, Jessie Alberts (Member Services/ Bookkeeping), Silas Branson, Andy Jones (Farm Manager), Becky Maden (Asst. Farm Manager), Aly Martelle, Erik Rehman, Jill Rotondo.

**Board of Directors:** Bonnie Acker, Kara Buchanan, Cindy Houston, Michael Healy, Christopher McCandless, Lis Mickenberg, and David Rider.

*Bottom Land News* is published periodically. We are always grateful for your feedback, favorite Farm photos, poems, letters, recipes, and ideas for articles. Visit our website [www.intervalecommunityfarm.com](http://www.intervalecommunityfarm.com) for past issues.

The Intervale Community Farm is a member-owned consumer cooperative, growing organic produce for over 500 households in the greater Burlington, VT area. Our land is located in the Intervale, a place "between the hills" where people have farmed for centuries. We are part of the global Community-Supported Agriculture (CSA) movement, linking farmers and consumers together to build a sustainable food system. We are now in our 21st season.