

The Hoophouse in Spring and Summer. © Pam Dawling 2015

Twin Oaks Community, Central Virginia. Author of *Sustainable Market Farming*

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This presentation covers

- ❖ How to make good use of your hoophouse when it's hot
 - Remove plastic, move hoophouse, shade, increase airflow, storage.
 - Grow crops
 - Warm weather food crops
 - Cut flowers
 - Seed crops
 - Cover crops
 - Cure or dry crops
 - Improve the soil
 - Solarize
 - Desalinize
- ❖ Crop rotations and scheduling
- ❖ Warm weather pests including nematodes
- ❖ Resources and my contact info

I live and farm at Twin Oaks Community, in central Virginia. We're in zone 7, with an average last frost April 30 and average first frost October 14. Our goal is to feed our intentional community of 100 people with a wide variety of organic produce year round.

30' x 96' FarmTek ClearSpan gothic arch hoophouse. We put it up in 2003, and like many growers we had the primary goal of growing more winter greens and early tomatoes and peppers.

Our hoophouse is divided longitudinally into five 4' beds and a 2' bed along each edge. Our paths are a skinny 12" wide, as we wanted to maximize the growing space.

Warm Weather Food Crops

- Suitable candidates
 - crops you'd like earlier
 - crops that grow in warmer climates
 - crops that grow better in drier climates
 - ideally, crops that are not in the same families as your main crops in other seasons.
- Tomatoes, peppers, eggplant, cucumbers, squash and zucchini, early green beans, cowpeas, soup beans, edamame, melons, baby ginger, turmeric, galangal, jicama (yam bean), peanuts.

Choosing shadecloth

- Our shadecloth is 34' x 96', about the same size as the footprint of the hoophouse, knitted polyethylene 50% shade from Gemplers, \$372 in 2004.
- Shadecloth is available
 - Woven or knitted: knitted fabric is stronger, lighter in weight, more flexible, and doesn't unravel when cut.
 - Polyethylene, PVC or polypropylene: Polypro is longer lasting, but only available woven. Avoid PVC as it will degrade the poly sheeting of the hoophouse.
 - In a range of shade factors. 40% is recommended for vegetables, 50% for flowers and 60% for cool weather vegetables in hot weather.
 - White, black or other colors

Here's our plan for summer 2008. We have 7 longitudinal beds, A-G. Beds A and G are the 2'/60cm wide edge beds.

Bed	Date	Task	Date	Task	Date	Task
A 2'	2/1	Sow snap peas at back	7/12	Pull snap peas, sow cowpeas	10/15- 10/25	Pull cowpeas, spread compost, rake in. Transplant senposai. Sow radishes, scallions
B 4'	4/1	Transplant cucumbers with compost in holes	7/12	Pull cucumbers, sow drying beans	10/23	Pull beans, spread compost, rake in. Transplant kale, chard, mizuna, arugula, yukina savoy. Sow tatsoi, chard
C 4'	3/15	Transplant tomatoes with compost in holes	7/30	Pull tomatoes, sow buckwheat & soy cover crop	9/8	Pull cover crop (use to mulch peppers); spread compost, rake in. Sow spinach, radish, scallions, bulls blood beets, tatsoi
D 4'	3/15	Transplant tomatoes with compost in holes	7/30	Pull tomatoes, sow buckwheat & soy cover crop	10/1- 10/10	Pull cover crop (use to mulch peppers); spread compost, rake in. Transplant Tokyo bekana, maruba santoh, Chinese cabbage, pak choy, yukina savoy. Sow turnips
E 4'	4/1	Transplant peppers with compost in holes			10/15- 10/24	Pull peppers, spread compost, rake in. Transplant lettuce, celery. Sow mizuna, arugula, lettuce mix
F 4'	4/1	Transplant summer squash with compost in holes	7/22	Pull squash, sow edamame	10/1	Pull remaining edamame for seed. Spread compost, rake in. Transplant lettuce, chard
G 2' west	4/1	Transplant ½ bed hot peppers with compost in holes			10/23	Pull peppers, spread compost, rake in. Sow spinach
G 2' east	3/2	Sow ½ bed bush beans	6/2	Pull beans, sow edamame	11/5	Pull edamame, spread compost, rake in. Sow onions

Books

- **High Tunnels: Using Low Cost Technology to Increase Yields, Improve Quality, and Extend the Growing Season** by Ted Blomgren, Tracy Frisch and Steve Moore. It was published by the University of Vermont Center for Sustainable Agriculture, with funding from SARE. \$15 or on the web: <http://www.uvm.edu/sustainableagriculture/hightunnels.html>
- **Walking to Spring** by Alison and Paul Wiediger <http://aunaturelfarm.homestead.com/bookorderform.html>
- **Managing Cover Crops Profitably**, SARE <http://sare.org/publications/covercrops/covercrops.pdf>
- **The New Seed-Starters Handbook**. by Nancy Bubel, Rodale Press,
- **The Flower Farmer** by Lynn Byczynski from www.GrowingforMarket.com
- **The Hoophouse Handbook** from www.GrowingforMarket.com

Articles

- *Growing For Market* May 2005 has an article by Steve Moore on summer hoophouse use in PA.
- *Growing For Market* June 2008 has an article I wrote "The Hoophouse in Summer"

- *Growing For Market* February and March 2009 Seed Growing articles
- *Growing For Market* August 2008 and November 2011 Ginger
- Ginger SARE Reports by Melissa Bahret, Greenhouse Ginger Cultivation in the Northeast: <http://mysare.sare.org/mySARE/ProjectReport.aspx?do=viewProj&pn=FNE06-564> and <http://mysare.sare.org/mySARE/ProjectReport.aspx?do=viewProj&pn=FNE07-596>

Web Resources

- The **HighTunnels** website has information on construction, warm weather crops and much else: <http://hightunnels.org/for-growers/>
- **Kerr Center for Sustainable Agriculture** Hoop House How-To. Low cost DIY small hoophouse. <http://kerrcenter.com/organic-farm/hoop-house/>
- **The Association of Specialty Cut Flower Growers** <http://ascfg.org/>
- ATTRA www.attra.ncat.org has a lot of good publications on many aspects of sustainable and organic agriculture.
- **Soil Solarization** Homepage: <http://agri3.huji.ac.il/~katan>
- **Soil Solarization University of California:** <http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74145.html>
- **Southern Exposure Seed Exchange**, www.southernexposure.com wonderful link for Seed Saving Resources: <http://homepage.tinet.ie/~merlyn/seedsaving.html>
- **Saving Our Seeds** website has information on isolation distances, seed processing techniques, where to get manuals on growing specific seeds, and links to more information: www.savingourseeds.org
- **Garden Medicinals and Culinaris** sells manuals on seed growing and processing: <https://www.gardenmedicinals.com/>

Supplies

- Klerk's Kool Lite Plus plastic. <http://www.gpnmag.com/greenhouse-structures-article2267>
- Robert marvel Plastics for Solarroof: www.robertmarvel.com
- Shade Cloth and grommets: Gemplers www.gemplers.com or www.pakunlimited.com or GreenTek, Inc <http://www.green-tek.com/>

Resources for Ginger and Turmeric

- www.EastBranchGinger.com Lots of info on website. Click the Cultural Info tab. Not currently selling ginger (2014-15)
- Alison and Paul Wiediger <http://aunaturelfarm.homestead.com/High-Tunnel-Ginger.html>
- Reza Rafie and Chris Mullins at Virginia State University https://www.youtube.com/watch?v=auayx8l_M04 <http://www.vsuag.net/wp-content/uploads/2014/10/Ginger-Day-Presentation-2014.pdf>
- College Of Tropical Agriculture and Human Resources, University of Hawai'i at Manoa <http://www.ctahr.hawaii.edu/oc/freepubs/pdf/scm-8.pdf>
- Puna Organics and Biker Dude to buy seed ginger in November <http://www.hawaiianorganicginger.com/how-to-order>. Turmeric and galangal also available
- *Growing For Market* August 2008, November 2011
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