

Brix Bounty Farm

Building Agricultural Skills for the Southcoast



Deep Winter Harvests (December 2010)

With a relatively moderate climate along the Southcoast, we can take advantage of our mild start to winter using row cover to extend outdoor harvests into December. Relying on a variety of season extension strategies we can even enjoy deep winter harvests. Spinach and cold hardy greens may overwinter into spring. By starting plants early and providing shelter with row cover and/or plastic we capture greater energy from early spring sunshine and enjoy fresh greens as early as mid-April.

Considering a Year-Round Harvest Season?

Crop and Variety Selection: There are a number of cold-hardy crops and varieties which are proven performers for the wintertime. Seed catalogs will often suggest specific varieties and are a good place to start. If you are new to wintertime growing we suggest starting out with brassica greens, spinach, and wintertime lettuces.

Mulch: Mulching is a simple strategy to extend the harvest window for root crops like carrots and leeks. A nice layer of straw mulch may provide enough insulation to allow for harvests throughout the winter months.

Microclimates: Extending the growing season works best by creating microclimates... this can range from raised beds, simple row cover, cold frames, high tunnels, to greenhouses

Cold Frames, Low&High Tunnels: Adding a layer of plastic improves solar gain and significantly reduces wind damage to crops. Opening these covers becomes rather difficult when freezing temperatures persist.

Greenhouses (Solar Gain and Snowloads): Greenhouses widen the harvest window and make deep winter harvesting much easier. As with low and high tunnels, consider the impact of snowloads and necessity to manually remove snow (assuming you have an unheated house).

Special Considerations for Deep Winter Growing

Nutrients in Low Light Conditions: Certain crops, notably spinach, can develop high levels of nitrates during the winter due to low light conditions... some growers will error on the side of lower nitrogen applications to prevent excessive levels. Occasional watering to leach nitrogen from topsoil is another strategy.

Water Management: Generally wintertime crops will need very little water over the winter. If you do plan on adding water to beds consider how you'll transport or deliver water in the depths of winter... outdoor spigots unless frost free aren't such a good idea.

Brix Bounty Farm - Fresh Vegetables & Community Education

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Deep Winter Harvests Tip Sheet

Special Considerations for Deep Winter Growing (continued)

Using Thermal Mass for Solar Gain: From stones to black water buckets; some growers use thermal mass to capture greater heat energy during sunny days, which give back a bit of their heat at the cold night sets in.

Hot Beds: An old time strategy popular in the days of horse and buggy was the use of manure to build hotbeds, capturing some of the thermal waste from decomposition to add warmth to the root zone of winter crops.

Looking Ahead to Spring: Early Seed Starting in Spring: Depending on your germination set up, starting seedlings in February can provide small starts for early/mid-March transplanting (undercover).

Heat&Light: The two major limiting factors for wintertime growing... both need to be considered when choosing wintertime crops.

In the end we often suggest growing crops which are most suited to wintertime production. In our eyes, choosing spinach and mustard greens which perform well in low temperatures make more sense than trying to grow tomatoes in the winter. Because of the labor involved with wintertime production we often look to winter greens as adding a splash of flavor and crunch to our meals. Production costs often make these crops rather dear and it's common to see greens retailed at winter markets in the range of \$12-18 per pound. Storage crops are a better bang for your buck volume wise.

And Don't Forget Sprouts... are a great way to enjoy fresh flavors and fortify your winter diet with nutrients. SEMAP is hosting a sprouts workshop on Saturday January 8th, 2011 – more info at www.semaponline.org

Resources for Wintertime Growing & Harvests – 10 Terrific Links to Get You Started:

- All About Hoophouses w/ Adam Montri - <http://www.sustainablefarmer.com/food/hoophouse.html>
- ATTRA – Season Extension for Market Growers - <http://attra.ncat.org/attra-pub/PDF/seasonext.pdf>
- Chelsea Green – Publisher of Eliot Coleman books - <http://www.chelseagreen.com/>
- Four Season Farm – Eliot Coleman - <http://www.fourseasonfarm.com/resources/index.html>
- High Tunnels Handbook – UVM - <http://www.uvm.edu/sustainableagriculture/hightunnels.html>
- Johnny's Selected Seeds – Season Extension 101 - <http://www.johnnyseeds.com/>
- Midwest Season Extension - <http://www.midwestseasonextension.org/>
- Model Business Plan - <http://mottgroup.msu.edu/uploads/files/59/HoopHouseBulletin.pdf>
- Thermal Banking for Greenhouses - http://sare.org/publications/FromTheField_Schwen1.htm
- Winter Harvest Quick Course – John Biernbaum

<http://www.hrt.msu.edu/assets/PagePDFs/conference-handouts/03-Garden-Season-Extension-Biernbaum.pdf>

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