



10 THINGS TO RE-THINK

AS YOU BUILD A GREENHOUSE & GROW

In the legitimate push to produce more and better food on the local scene, there has been a surge to integrate that perfect production tool against Midwestern winters: the greenhouse. It might be glass, or pipe and plastic, high tunnel or floating; it might serve to extend the growing season on either end, re-allocate the current workload across more months, or simply to provide a weatherproof workspace in early spring. Regardless, it takes thought to do it right. Amidst a growing list of references “out there” to help you with that process, here is a checklist of key factors to consider before and as you add this feature to your farm and garden enterprises.

1. **SEASON EXTENSION or YEAR-ROUND** — which is it for you; taking a break, staffing needs, heat & light, markets ...
2. **FERTILITY & SOILS** — role of compost, in the ground/pots/hydroponics/soil bags, nutrient density and taste ...
3. **YOUR MARKET** — is it there for more food or food at a different season, new markets, seasonal pricing ...
4. **THE REAL COST** — structure, labor, compost, irrigation, heat & light, product price, cash flow ...
5. **HEAT & LIGHT** — passive or not, power source, fuel availability ...
6. **IRRIGATION** — water source, delivery system ...
7. **CONSTRUCTION** — slope, drainage, R value, wall height, bracing, who best to build it, portable vs. stationary ...
8. **EXPERIENCE** — what’s your’s, need for internship, starting slow
9. **CHOOSING SEED VARIETIES** — including rotations, companion planting, winter hardy ...
10. **BUSINESS PLAN** — can you answer the 5 “W’s” (why, what, when, where and who) from your mom, neighbor, banker and yourself ...

► ***Please turn this over for a few good resources...***

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RESOURCES

1. ATTRA – Newsletter of the National Sustainable Agriculture Information Service; www.attra.ncat.org. NOTE: V.17 No.2 – April/May 2009 focus on hoop houses.
2. Sow the Seeds Fund – Institute for Agriculture and Trade Policy fund to support sustainable food systems has a new hoop house site with podcasts, farmer blogs, and overall food work resources; www.sowtheseedsfund.org. NOTE: Undercover Garden blog is from a hoop house farmer.
3. Some other books from the MOSES Organic Farming Conference 2009 Book Store (in addition to several listed in the above ATTRA issue):
 - a. *Greenhouses for Homeowners and Gardeners*, Publisher: NRAES
200-page book with sample calculations, greenhouse plans and 150+ line drawings. Covers construction planning, framing materials, glazing, layouts, equipment, environmental control, and selection of kits. Also discusses window greenhouses, growth chambers and garden structures. 2000.
 - b. *Extend your Garden Season: Row Covers and Mulch*, Storey Country Wisdom Bulletin a-148
4. The *Garden Goddess Passive Solar Greenhouse Manual* is a new publication developed by Land Stewardship Project Farm Beginnings graduates Carol Ford and Chuck Waibel. Using an innovative, customized design, Ford and Waibel's Garden Goddess operation produces greens throughout the harsh western Minnesota winter with little artificial heat. The operation delivers the greens to a group of Community Supported Agriculture (CSA) subscribers.

The manual describes how to build and operate a passive solar greenhouse for northern climates, as well as what to grow in such a system. For information on ordering the manual, contact: Garden Goddess Produce, 405 S. 4th St., Milan, MN 56262-2800; phone: 320-734-4669; e-mail: newworld@fedteldirect.net.

To read a Farm Beginnings profile about Ford and Waibel, see www.landstewardshipproject.org/fb/graduates.html. An *Ear to the Ground* podcast featuring their operation is at www.landstewardshipproject.org/podcast.html?t=7 (episode 29).