

# Checklist of Steps for A Prospective High Tunnel Grower

*Developed by Extension Professor, Richard Brzozowski and  
Extension Maine AgrAbility Coordinator Leilani Carlson, University of Maine Cooperative Extension.*

**T**he purpose of this checklist is to provide you with likely steps as a prospective grower in helping you to make wise decisions regarding high tunnel construction and production. This checklist is designed to answer the key question: Would such a production method fit me and my situation in the near future?

If at any time in the process, you feel you are detecting a “red light,” stop and take time to rethink your idea. It is much better to make mistakes (and then correct those shortcomings) on paper or in planning than to spend money and take a loss. At this stage, your only investment is time.

- Learn as much as you can about high tunnels. Plan at least 12 months in advance of construction and production.
  - \_\_\_ Identify and review reliable resources.
  
- Determine your goal(s) for the prospective high tunnel enterprise. Think three to five years ahead. Just write down some general notes, if your goals are unknown at this time. Your goal(s) could change. However, it's good for you to identify the target or purpose for such an enterprise. Knowing your target or purpose will help shape your search for information and details.
  
- Speak with your local Extension agent, Extension specialist, or crop consultant who is knowledgeable about high tunnel production.
  - \_\_\_ Determine the names of the local growers who use high tunnels successfully.
  - \_\_\_ Ask about informational resources related to high tunnels.
  - \_\_\_ Determine if you need to consider anything (such as assistive technology or other research) to match your abilities. AgrAbility staff can help you address limitations.
  
- Speak with farmers and growers who have used a high tunnel(s). Take notes during conversations.
  - \_\_\_ What crops have they found to be the most productive/successful in the high tunnel?
  - \_\_\_ What advice do they have for you?
  - \_\_\_ What mistakes did they make?
  - \_\_\_ What was the cost of their high tunnel? (Consultation costs, operational costs).

- Visit the operations of other farmers who manage a high tunnel(s) in production.
  - Ask permission to take photos.
  - Make note of the crops they grow in their high tunnel and varieties.
  - Ask about average yields of the crops.
  
- Perform market research for potential crops you are considering.
  - Learn as much as you can about your market – the industry, customers, competition, products, suppliers, etc. before you spend a lot of time and money starting a new enterprise.
  - Identify two or more potential buyers of your produce and talk with them about your business plans.
  - Get details from your potential buyers regarding specific crops, timing of sales, price ranges, other specifications, etc.
  - Consider wholesale accounts (restaurants, stores, hospitals, schools, etc.) as well as retail customers.
  - Determine the size of your market in terms of number of potential customers and sales. Is there a need for another grower in this market?
  - How do you compare to other producers growing similar products regarding prices, service, quality, variety, etc? What are your competitive advantages?
  - Determine if this new enterprise will be profitable
  - Use your research to make decisions and plan strategy
  
- Research sales laws of fresh produce in your town or in the towns/cities in which you will likely sell.
  - Determine if you need specific licenses or certifications.
  
- Determine where on your property a high tunnel could be placed for optimum performance.
  - Consider working with the Natural Resource Conservation Service (NRCS) and the soil survey maps that are available.
  - Evaluate the soil profile by digging a test pit near the construction site.
  - Get advice from your local NRCS soil conservationist regarding soils on your property and a suitable high tunnel site.
  - Determine optimum size of a high tunnel (foot print and height) for the space.
  - Determine if you need to amend the land in preparation for construction?
  - Determine if trees need to be felled to allow for optimum sunlight?
  - Determine if there is adequate room for expansion (additional high tunnels, or lengthening existing tunnel or adding a existing high-tunnel) on the site you select?
  - Determine if there is easy access to the high tunnel by cart, utility vehicle, pick-up truck, or tractor?
  - Consider location of irrigation and electricity.
  
- Determine if a building permit is necessary from your town office or city hall.
  
- Contact a supplier of high tunnels for your region.
  - Speak to them about your idea.
  - Get a price list for materials.
  - If suitable, place your order to meet your timeline.

- Set a reasonable timeline for construction of the high tunnel.
  - Consider typical weather conditions.
  - Consider typical growing season and your potential selling dates.
  
- Prepare the site before construction begins (do-it-yourself or pay someone to do it).
  - Level or grade land.
  - Build passable access road.
  - Establish irrigation system layout from source to site (consider seasons when there are freezing temperatures).
  - Determine if electricity is essential.
  - Test the soil to determine pH, organic matter percentage, and nutrient levels for specific crop(s).
  - Amend soil as recommended (organic matter, pH amendments, fertilizers, etc.).
  - Determine irrigation system to be used.
  
- Arrange for construction of the high tunnel (do-it-yourself or pay someone to erect the high tunnel).
  - Order or obtain end wall materials .
  - Consider appropriate doors (sizes and types) on both ends.
  
- Set timeline for sowing and planting.
  - Determine reliable sources of seed and transplants.
  - Consider appropriate varieties, days to harvest, and successive plantings.
  - Consider typical pests of specific crops and identify a plan for managing each.
  - Consider mulching materials to help control weeds, retain soil moisture, keep produce clean.
  - Consider staking or trellising of some crops.
  
- Develop a timeline for harvest and sales.
  - If you plan to grow a food crop, learn about applicable food safety regulations.
  - Order tools and equipment for harvesting, washing and processing.
  - Order labels and packaging supplies.
  
- Set a schedule of maintenance activities for the high tunnel through every season of the year.
  - Winter
  - Spring
  - Summer
  - Fall



*Information in this publication is provided purely for educational purposes. No responsibility is assumed for any problems associated with the use of products or services mentioned. No endorsement of products or companies is intended, nor is criticism of unnamed products or companies implied.*

© 2018

**Call 800.287.0274 (in Maine), or 207.581.3188, for information on publications and program offerings from University of Maine Cooperative Extension, or visit [extension.umaine.edu](http://extension.umaine.edu).**

*The University of Maine does not discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status and gender expression, national origin, citizenship status, age, disability, genetic information or veteran status in employment, education, and all other programs and activities. The following person has been designated to handle inquiries regarding non-discrimination policies: Director, Office of Equal Opportunity, 101 North Stevens Hall, Orono, ME 04469, 207.581.1226, [eoinfo@umit.maine.edu](mailto:eoinfo@umit.maine.edu).*