

High Tunnels on Reclaimed Land

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High Tunnels

- Metal Frame covered with clear plastic
- Think “low tech” greenhouse
- Usually crops grown in native soil
- Can supply soil in raised beds 12”-18” deep
- All water for plants must be supplied
- Provides a lot of control over plant environment
- Intensifies crop system

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Advantages

- Timing for production is longer & more flexible
- Allows marketing flexibilities
- High control of quality of product
- High degree of pest management
- Low weather impacts



Challenges

- Mistakes in High Tunnels are magnified
- We often see over application of lime and fertilizers – no rainfall + little leaching = buildup
- Tillage methods can cause plow pans, etc.
- Reduction in soil organic matter – provide and replace!
- Good management = very good results
- Poor management = very poor results

Crops We See...

- Tomatoes are #1 – heirloom, traditional and cherry
- Strawberries are very popular
- Half-runner beans
- Pickling cucumbers
- Some leaf crops
- Specialty or niche crops



Tips

- Start with a good site on a Flat slope
- Good soil already present or build a 12-18” layer called a “raised bed” of topsoil
- Make sure you have a dependable and adequate supply of clean water year-round
- Water source must be free of contaminants

Tips (continued)

- Soil test, soil test, soil test...every year
- Apply according to the soil test recommendations
- Some, limited tweaking may be warranted, but resist “more must be better”
- Micro Irrigation utilizing drip systems seem to work best in High Tunnels to deliver the right amount of water at the right time



Resources – Growing & Structures

- USDA-NRCS Service Centers & Web Pages
- USDA-NRCS – EQIP & Other Programs
- WVU – Dr. Lewis Jett
- WVSU – Extension Service
- Local Growers
- Manufacturers of High Tunnels



Resources - Soil

- USDA-NRCS – Web Soil Survey; Service Center Staff; Resource Soil Scientists
- WVU - Dr. Jeff Skousen



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Thank you!

Any Questions?