Packing Shed and Vegetable Storage at Patchwork Green Farm

- Farm and marketing overview
- Packing shed walk-through in pictures
- Why good storage is essential
- Our walk-in cooler
- Our root cellar
- Facility considerations: Flow, traffic pattern, layout, access
- Costs
- Questions and Discussion
Patchwork Green Farm
22 years of farming organic vegetables for our Decorah community
MARKETS
2019-2020

• Decorah Farmers’ Market
• Oneota Food Coop
• Restaurants and Caterers
• Food Hub
“AS A FARMER, YOU ARE A MANAGER OF RISK”
PAUL ARNOLD OF PLEASANT VALLEY FARM, NY

TYPES OF RISK:
FINANCIAL
LABOR
MANAGEMENT
FOOD PREP (SAFETY)
STORAGE
ACCESS AND SITING OF A NEW FACILITY

WATER & ELECTRICITY
PROXIMITY TO PRODUCTION AREA
FLOW FROM FIELD TO PREP AREA TO STORAGE TO MARKET
2015: THE NEW PACKING SHED

INDOOR SPACE: 21’ X 24’
COVERED OUTDOOR SPACE: 11’ X 24’
2 DOORS, 2 WINDOWS
FIRST UP: WASH YOUR HANDS!

- Water
- Soap
- Nail Brush
- Towels
- Waste Basket
STAINLESS STEEL SINKS

- Multiple basins
- Easy to clean
- Consider Drainage
OVERHEAD HOSE

- $200 kit from Johnny’s
- 50’ hose, cable, hangers, pulleys
- One-handed and no-handed washing
Useful tables for your system

Container storage and the whiteboard
Doors, Floors and Electric
LIGHTING & CEILING

- Pay for Quality LED Lights
- Consider shadows
- Screening for outdoor space (GAP)
INSIDE THE PACKING SHED

INSULATED & PEST-FREE
EASY TO WASH/CLEAN
TWO DOORS
STORAGE
WALK-IN COOLER
INDOOR WASH AREA
STABLE TEMPERATURE
WHERE DOES IT DRAIN?

SEDIMENT BUCKET OR TRENCH DRAIN?

INDOOR FLOOR DRAIN
WALK-IN COOLER

OVERSIZE COMPRESSOR: USED ARE FINE!

OUTDOOR CONDENSER

INSULATED, LEVEL FLOOR
MULTIPLE STORAGE OPTIONS

- Short-term vs. Long-term storage needs
- Temperature
- Humidity
- Ease of access
Root Cellar

16' X 11' interior space
Insulated Concrete Walls (ICF)
Electricity - fans, outlets, lights
EXTERIOR SLIDING DOOR: 6’ ‘AIRLOCK’
5’ COOLER DOOR
The CoolBot

Large AC unit

$400 CoolBot sensor

Easy to maintain temperatures in the 30’s
TWO INTAKE PIPES
FAN IN ONE PIPE
AIR THROUGH COOLBOT
TEMP SENSOR ON FAN
EASY TO WASH SURFACES

* METAL SHEETING ON THE CEILING
* DAIRY PANELS (TEXTURED POLYWALL)
* SLOPED FLOOR
Humidity control
DESIGNING YOUR FACILITY

• Layout: plan for the next 20 years (flexibility of spaces)
• Traffic Patterns: current pathways/anticipated pathways
• Flow: clear, logical, ergonomic flow from field to delivery
• Access - door location and count, handles, width
  • - shortest distance to coolers/containers/water
COST

• Root Cellar: $15,000
  • Includes construction, doors, electric

• Packing Shed: $45,000
  • Includes water line, electric, concrete, construction, gutters, insulation
LESSONS LEARNED

• Door handles and stops
• Cool-bot insulation in the winter - stop the draft.
• Plumbing - do it right.
• Brushed concrete at root cellar entrance
• Electric is expensive!