



Great Lakes Fruit, Vegetable & Farm Market Expo
DeVos Place Convention Center
Grand Rapids, MI
December 9-11, 2003



Farm Marketing II

Tuesday afternoon 2:00 pm

Where: Grand Gallery Room C-D (lower level)

CCA Credits:

Moderator: Ron Goldy, SWMREC MSU Extension

2:00 p.m. Small Scale Farm Marketing and Adding a Greenhouse

- Pam Bosserd, Bosserd Family Farms

2:30 p.m. Practical Greenhouse Designs for Farm Marketers

- Tom Dudek, Ottawa County Extension-MSU

3:00 p.m. Flowers to Sell in Baskets and Planters

- Norman Lownds, Michigan State University

3:30 p.m. Dried Flowers and other related Greenhouse Products

- Jan Van Houtte, Van Houtte Farm Market
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Practical Greenhouse Designs for Farm Marketers

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1. Basic Greenhouse Structures
 - Three Basic Types
 - Lean-to
 - Detached
 - Ridge and Furrow/Gutter connected
2. Detached Greenhouse (Quonset)
 - Stand Independently
 - Can be Connected (corridor)
 - Arched Rafters-Solid End walls
 - Reduced Area Near Sidewalls
3. Ridge and Furrow Greenhouse
 - Connected at the Eave-Gutter
 - Internal Wall Absent Below Gutter
 - Gabled or Curved Arch
 - Several-“Range”
4. Structural Components
 - Rafters
 - Purlins
 - Side Posts
 - Side Wall
 - End Wall
5. Framing Materials
 - Aluminum
 - Steel
 - Wood
6. Covering Materials
 - Glass
 - Fiberglass
 - Polyethylene

7. Consider Design Criteria
 - Dead Load
 - Live Load
 - Snow Load
 - Wind Load
 - Foundation
8. Heat Systems
 - Natural Gas
 - Fuel Oil
 - Propane
9. Heaters
 - Emergency Only Heater
 - Production Heater
10. Ventilation
 - Vents
 - Fans
 - Shading
11. Irrigation
 - Water Sources
 - Hand
 - Automated
12. Fertilization
 - Hose-on
 - Injector
13. Retail Layout
 - Benching
 - Aisles
 - Floor
14. Additional Items to Consider
 - Soil Type/Drainage
 - Utilities
 - Multiple Use
 - Other Items
15. Additional Resources
 - Greenhouse Engineering
 - Ball Red Book, Volume 1: Greenhouses and Equipment
 - Greenhouse Operations and Management
 - Green Profit on Retailing