Profitable Specialty Crop Farming

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Upcoming Programs of Interest

- **FSMA trainings**, 1/29 (Springfield), 2/1 (Jackson)
- **Bringing Back the American Small Farm**, Mar 8-9 2018, West Plains
- **Apple Grafting**, 4/11 (Springfield), 4/16 (Carthage)
- **Blackberry Workshops**, 1-4pm;
  - 4/25, 6/27; Southwest Research Center, Mount Vernon
  - 4/26; Farmington
Outline

- Introduction
- Inventory your resources
- Determine the cropping system
- Considerations in producing the crop
- Marketing the crop
Introduction

- Why are you interested in produce farming?
  - Increase family cash income
  - A step to full time farming
  - Aid in times of unemployment
  - Supply part of the family food supply
  - Farming experiences for children
  - Hobby
Introduction

- Is produce farming for you?
  - Time and labor
  - Desire
  - Capital
  - Technical knowledge, experience
  - Markets
Introduction

- Is produce farming for you?
  - Adverse weather and other problems
  - Site
  - Time for business establishment
  - Quality products
  - Cooperation
Inventory Your Resources

- Site
- Soil
- Climate
- People
- Capital
- Facilities and equipment
Inventory Your Resources

Site

- Location, location, location...
- Production considerations
  - Limitations
Inventory Your Resources

Site

- Marketing considerations
  - Limitations

- Farmers’ Market
- Produce Auction
- PYO Blueberry Farm
Inventory Your Resources

Soil

- Arrange for a soil test
- Important soil characteristics
  - Chemistry
    - Soil pH
    - Fertility level
    - Organic matter
  - Water drainage
  - Overall soil health
  - Previous uses of the site
Inventory Your Resources

Soil

- Modifying soil characteristics
  - Soil pH - amendments
  - Fertility level – nutrient amendments
  - Organic matter – green manures, cover crop rotations, compost, organic amendments
  - Water drainage – berming, tile drainage, terracing
Inventory Your Resources

Climate

- Important climate considerations
  - Temperature
  - Water
  - Light
Inventory Your Resources

Climate

- Modifying your climate
  - Temperature
    - Protected structures - high tunnels, greenhouses
    - Row covers
  - Water
    - Irrigation
    - Planting on berms or raised beds
  - Light
    - Shading
Inventory Your Resources

Climate

- Modifying your climate
  - Water
    - Irrigation
      - Availability of water
      - Quantity of water
      - Water quality
Inventory Your Resources

People

- You!!!
- Management
- Labor
- Family vs hired labor
- Support system
Inventory Your Resources

Capital

- Undercapitalization is a primary reason for failure!!
- What will be the source for startup capital?
- Where will operating capital come from?
- Plan ahead
  - Business and marketing plans
  - Crop production budgets
Inventory Your Resources

Facilities and Equipment

- What are facility needs?
  - Starting transplants
  - Production
  - Handling the crop
  - Sales needs
  - Storage

- What are equipment needs?
  - Routine needs
  - Occasional needs
  - Do you really need a new tractor?
Determine the Cropping System

- Cultural requirements
- Crop value
- Perishability
- Production costs
- The right crop mix
- Personal preferences
Determine the Cropping System

Cultural Requirements

- Easy to grow crops
  - Blackberry
  - Green bean
  - Okra
  - Sweet potato
  - Sweet corn

- Difficult to grow crops
  - Tree fruit
  - Grape
  - Tomato
  - Vine crops
Determine the Cropping System

Crop Value

- **High value crops**
  - Tomato
  - Asparagus
  - Berries
  - Peach

- **Low value crops**
  - Cabbage
  - Radish
  - Turnip
Determine the Cropping System

Perishability

- More perishable
  - Berries
  - Peach
  - Asparagus
  - Sweet corn
  - Peas
  - Muskmelon
  - Greens

- Less perishable
  - Potato
  - Sweet potato
  - Winter squash
  - Onion
  - Apple
Determine the Cropping System

Production Costs

- High costs
  - Tomato
  - Fruits

- Low costs
  - Sweet corn
  - Root vegetables
Determine the Cropping System

The Crop Mix

- Specialization vs diversification
- Analyze the market
- Carefully evaluate each crop
- Consider the combination of crops
Determine the Cropping System

Most Profitable Crops

- Depends on the realities of your farm
- Depends on the realities of your market
- Protected culture vs open field
- Harvest time/off season production
- Novelty crops or cultivars may offer niche opportunities
- Organic vs naturally grown vs conventional
Determine the Cropping System

Most Profitable Crops

- Tomato – field or protected culture
- Specialty greens, lettuce, spinach (especially off season)
- Herbs (cilantro, basil, chives, dill)
- Cucumber
- Peppers
- Berries
- Cut flowers
Determine the Cropping System

Personal Preferences

- Growers tend to do better with crops they like and have experience growing.
Production Considerations

- Site selection
  - What are the site characteristics?
  - What is the history of the site?
  - What is going on around the site?
  - Will it be difficult to prepare the site?
Production Considerations

- Site selection

- Cultivars
  - Choose adapted cultivars
  - Choose disease resistant cultivars
  - Consider production challenges
  - Consider market needs
Production Considerations

- Site selection
- Cultivars

Seed and plants

- Determine if direct seeding or transplants is the best way to go
- Always buy from a reputable source
- Always use fresh seed
- Consider your planting plan
Production Considerations

- Site selection
- Cultivars
- Seed and plants

- Soil preparation, fertility, improvement
  - Consider the soil test
  - Organic matter is important
Production Considerations

- Site selection
- Cultivars
- Seed and plants
- Soil preparation, fertility, improvement

**Planting techniques**
- Standard practice is to grow in beds
- Direct seeded or transplants?
- Plastic or organic mulches?
- Cover crops between rows?
Production Considerations

- Site selection
- Cultivars
- Seed and plants
- Soil preparation, fertility, improvement
- Planting techniques

**Cultural practices**

- Pest management – consider IPM
- Weed management
- Training and pruning
- Trellising
- Protection – tunnels, low tunnels, row covers
Production Considerations

- Cultural practices
  - Irrigation
    - Drip or trickle is favored
    - Consider water quality
    - Food safety issues and water
Production Considerations

- Site selection
- Cultivars
- Seed and plants
- Soil preparation, fertility, improvement
- Planting techniques
- Cultural practices

- Harvesting, handling, packaging, storage
Marketing the Crop

- Crop characteristics
- Demand
- Competition
- Location, location, location...
Marketing the Crop

- Direct market potential
  - Farmers market
  - On farm stand or roadside market
  - Pick-your-own
  - CSA, Food Circle
  - Internet sales
Marketing the Crop

- Wholesale marketing potential
  - Produce auctions
  - Sales to other sellers
  - Grocery stores, restaurants, florists, institutions
Specialty Herbs

- **Advantages**
  - Basil and cilantro – consistent demand
  - Increasing demand for other herbs – rosemary, sage, oregano, mint, dill
  - Some adapted to hydroponics
  - Potential for dried herb sales
  - Potential for value added – herb salts, herb rubs, herb teas, etc.

- **Disadvantages**
  - Overall small niche market
Specialty Herbs

- Production considerations
  - Standard cultural practices
  - Generally best started as transplants (except cilantro, dill)
  - Weed management critical
- Marketing considerations
  - Well suited for direct market local sales
  - Increasing demand from restaurants, grocery stores
  - Consider sales of potted herbs
  - Basil and cilantro – good market demand
  - Niche markets for other herbs
Berries

- **Advantages**
  - Consistent growth in berry consumption
  - Recent improvements in cultivars – thornless blackberry, blueberries for hi pH soils, cultivars adapted to plasticulture
  - Cultural innovations – RCA trellis, tunnel culture, plasticulture
  - Well suited for value added

- **Disadvantages**
  - Perishable fruit
  - Pest management
Berries

- **Production considerations**
  - Site prep important
  - Cultivar choice critical
  - Refrigerated storage critical

- **Marketing considerations**
  - Well suited for local direct markets
  - Well suited for larger scale production
  - Local production has not met demand
Specialty Greens

- **Advantages**
  - Suitable for 12 month production and sales

- **Disadvantages**
  - Perishable
  - Food safety considerations
  - Labor intensive crop
Specialty Greens

- Production considerations
  - Consider food safety concerns
  - Adapted to protected culture
  - Range of cultural considerations

- Marketing considerations
  - Lots of marketing options – whole heads, fresh cut mixes, microgreens
  - In demand from many markets
Garlic

- Advantages
  - Growing demand
  - Durable product

- Disadvantages
  - Labor intensive crop
Garlic

- Production considerations
  - Straightforward production
- Marketing considerations
  - Adapted to many markets – local direct market, restaurants, wholesale, internet
Table Grapes

- Advantages
  - Limited supply of local table grapes
  - Recently developed adapted cultivars

- Disadvantages
  - Expensive to establish
  - Pest management
  - Labor intensive
  - Management intensive
Table Grapes

- Production considerations
  - Trellis
  - Insect and disease control critical

- Marketing considerations
  - Low supply of local table grapes
  - Adapted to many markets
Cut Flowers

- Advantages
  - Limited supply of local cut flowers
- Disadvantages
  - Quality is critical!
  - Labor intensive
Cut Flowers

- Production considerations
  - Well suited for protected culture
  - Varied production practices
  - Cold storage is necessary

- Marketing considerations
  - Variety of markets available
In Closing...

- Educate yourself
  - Reading
  - Workshops
  - Conferences
- Consider individual consultation with Extension specialists and other subject matter experts
- Develop your peer network
Any Questions?

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