# STARTING OUT WITH ELDERBERRIES

#### INTRODUCTION

- Brian Bolle
- 32 years in Information Technology
- 50 miles south of St. Louis
- 70 acres
  - 5 acres elderberries
  - 40 acres hay
  - 25 acres woods

#### WHY ELDERBERRIES?

- Retirement income
- Field rent income is minimal
- Low capital investment
- Minimal maintenance
- Growth market
  - Missouri farmer niche markets
  - Other niche produce is in earlier stage of development

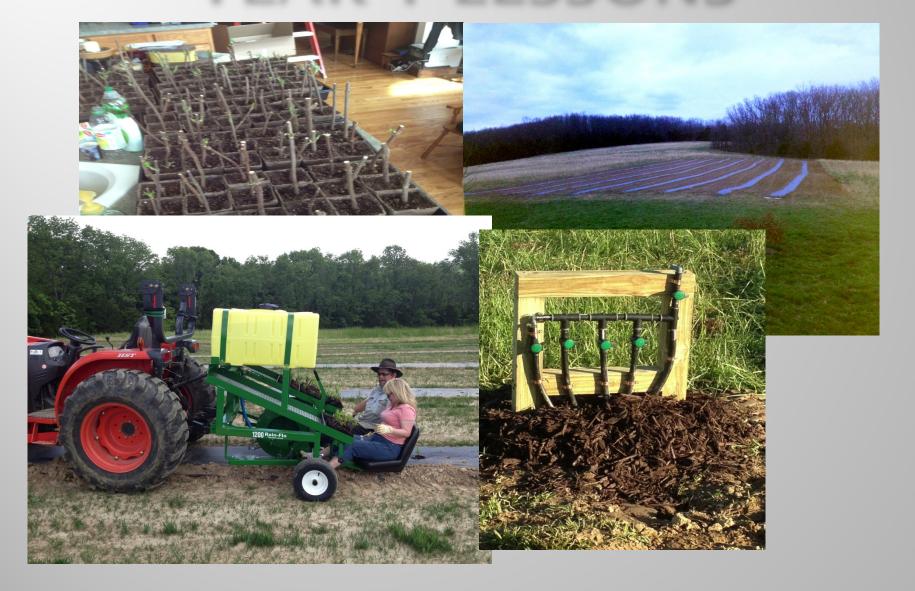
#### WHY ELDERBERRIES?

- Gross income
  - \$5k to \$10k per acre based on \$2 per pound & 2.5k to 5k lbs per acre.
- Relatively low capital investment
- Perineal crop
- Growth market
- Recent research
  - University of Missouri
  - University of Kentucky
  - Cornell University
  - University of Idaho

#### INITIAL PLAN

- Boot strap by starting small
  - Plant ½ acre
  - Start cuttings in peat pots in greenhouse
  - Evaluate several varieties
- Use house well for irrigation
  - Use irrigation tube not drip tape
- Invest in key equipment
  - Planter
  - Plastic Mulch Layer
  - PTO Tiller
- Use clover and fescue for cover crop
- Augment soil Compost, fert., azomite

# YEAR 1 LESSONS



### YEAR 1 LESSONS

- Start cuttings in field
  - Wyldewood high mortality
  - Ranch & Bob Gordon did well
  - No pest / predation issues
- Irrigation
  - Find better way to install tube
  - Manual irrigation not consistent
  - Connect with MPR for better plan
- Didn't need planter initially

- Plant one additional acre
  - Propagate my own cuttings
  - Maximize Ranch & Bob Gordon
- Implement MPR irrigation plan
  - DC irrigation controller & solenoids
  - Half acre zones
  - Use middle buster to trench for lines
- Change soil augmentation
  - Added 40 yards compost
  - Added wood mulch to cover plastic earlier
  - Did not add azomite

# YEAR 2 LESSONS



## YEAR 2 LESSONS

- Pest & predation issues
  - Bob Gordon need deer fencing.
  - Birds held at bay with plastic owls and mylar tape
  - High incidence of mite damage
  - Modified cover crop to winter wheat, K31 fescue and clover due to availability.
- Irrigation
  - Controller worked very well
  - Need better way to install tubing!
- Changing soil augmentation had no impact

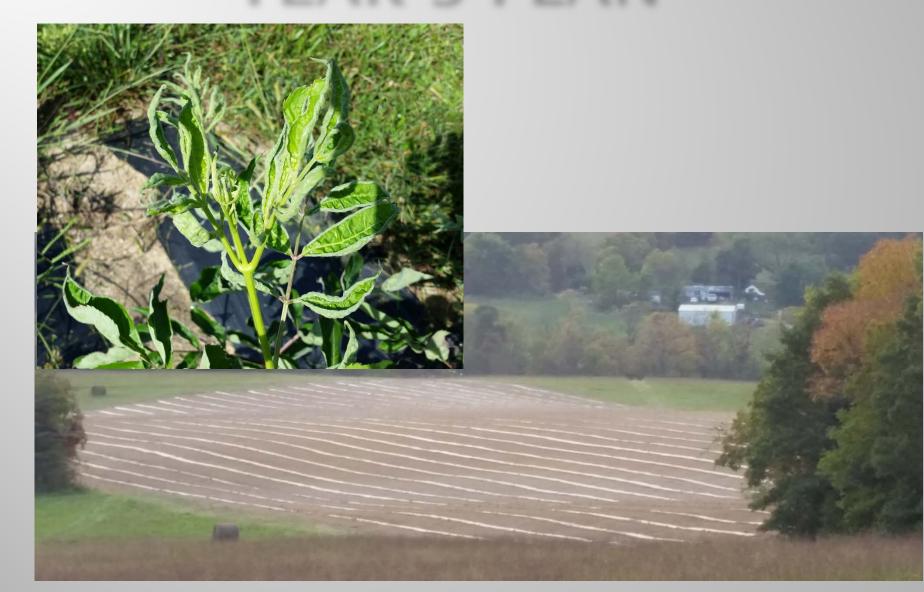
## YEAR 2 LESSONS

- Harvested 180 lbs. from original ½ acre.
- Hand processed the berries
- Sold into local market
  - Local fruit stands
  - Developed several resellers into local health conscious market.
  - Averaged \$10 per pound.

- NRCS grant to plant 12 acres in 3 years
  - Four acres per year for three years
  - Reimbursement for:
    - New cuttings
    - Cover crop
    - Mulching
    - Soil augmentation
- Field plan
  - Propagate my own Ranch cuttings
  - Use dormant oil to control mites in cuttings
  - Purchase Wyldewood and Adams cuttings

- Implement MPR irrigation plan
  - Build equipment shed and well house
  - Drill irrigation well
  - Use solar panel to drive AC irrigation controller
  - Run 2,000 ft. of class 160 two inch PVC
  - Use tubing layer for 16,000 feet of drip tube
- Change soil augmentation
  - Add 1,200 lbs. of 12-12-12
  - Compost is still key
  - Use clover and fescue for cover crop

- Use hand destemming, low end grape destemmer, friend's shaker table.
- Use friend's freezer for storage
- Expand the health conscious market
- Connect with some local wineries.
- Purchase stainless processing sinks
- Work on organic and kosher certifications



## SUMMARY

- Develop a good irrigation model
  - Use MPR Craig Pizarkewitz 314-575-6505
  - Use drip tubing not tape.
  - Use controller, not manual
  - Plan for about one inch per week
- Determine varieties that thrive in your area
  - Don't assume wild varieties will produce better
  - Plant a test field
  - Plan for fencing expense for Bob Gordon variety
- Develop pest and predation plan
  - Birds
  - Mites, Japanese Beetles, Drosophila
- Wood mulch your plants soon after planting

### SUMMARY

- Field equipment needed to start out:
  - Plow & disk or tiller
  - Drip tube layer Agri Supply
  - Plastic Mulcher Morgan County Seeds
  - Cultipacker Craig's List
  - Broadcast spreader

## SUMMARY

- Field equipment needed to grow:
  - Planter Morgan County Seeds
  - Mulch spreader Millcreek Mfg.
- Harvest equipment needed to grow:
  - Destemmer River Hills Harvest
  - Walk-in freezer
  - Commercial Cooler
  - Stainless steel sinks and processing tables

#### TO GROW INTO THE FUTURE

- Starting online grower's forum
  - moelderberry.farm
- Need Missouri grower's cooperative
  - Cost reduction through volume purchases
  - Market development
  - Product development
  - Regional services
  - Regional equipment rental or service pools
  - Regional accessible expertise