

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 $\frac{1}{2}$ 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

YEAR 2 PLAN

- 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 $\frac{1}{2}$ acre.
- Hand processed the berries
- Sold into local market
 - Local fruit stands
 - Developed several resellers into local health conscious market.
 - Averaged \$10 per pound.

YEAR 3 PLAN

- 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

YEAR 3 PLAN

- 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

YEAR 3 PLAN

- 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

YEAR 3 PLAN



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