

# Looking at Opportunities

<http://extension.missouri.edu/webster/horticulture-commercial.aspx>

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# Look for Higher Value

- Worth more to customer than generic or commodity products
- Specialty crops and value-added - differentiate the product
- Varies farm to farm / region to region
- Products that are the right fit for your skills and resources (soils)
- Use resources already available on farm to create a second “stacked” enterprise



# Develop a List of Possible Enterprises

- Which enterprises are predominant in your area?

## Need a Market Report

- [www.USDA.gov](http://www.USDA.gov)
- <https://www.communitycommons.org/groups/alternative-crops-project-afri/local-food-market-evaluation-tool/>





- Home
- Hub Activity
- Members
- Suitability Maps
- Food Market Evaluation Tool
- What Should I Grow?
- Resource Guide
- Management Assessment
- Feedback



## Welcome!

The Agriculture Opportunities in Missouri site serves as a resource to help Missouri producers learn about alternative agriculture opportunities that are available and assess these opportunities based on a given producer's local market opportunities, level of expertise, financial position and available agronomic and machinery resources.

Currently, the site shares information about a diverse mix of cover crops, bioenergy crops, specialty crops and other alternative crops. In the future, however, look for an expanded site that features information about other alternative agriculture opportunities.

Using the icons to the left, you can access the five Agriculture Opportunities in Missouri tools. Click through these five tools to discover more about Missouri alternative agriculture opportunities and explore whether a particular opportunity would be well-suited for your farm!

This web site and information is made possible through support from the following programs (click to view)

## Population (persons within radius)

<b>Population</b>	<b>Number of Persons</b>	<b>Persons of Hispanic</b>	<b>Percent Hispanic</b>
Within 10 Miles	23,560	420	1.78
Within 20 Miles	40,528	700	1.73
Within 30 Miles	69,669	1,092	1.57
Within 10 Miles	West Plains (11,986)		
Within 10 to 20 Miles	Mountain View (2,719)		
Within 20 to 30 Miles			

Source: [U.S. Census Bureau, 2010 Decennial Census](#)

## Farmers Markets (6 within 35 Miles)

[U.S. Department of Agriculture, USDA - Agriculture Marketing Service: May 2015](#)

Farmers Markets	Name	Location	Dist.
1	West Plains Area Farmers' Market	711 Washington St, West Plains	0.4
2	<a href="#">Greater Ozark Farmers Market</a>	1321 Preacher Roe Blvd., West Plains	1.8
3	Heart of the Ozarks Farmers' Market	1755 S. US Hwy 63, West Plains	2
4	Willow Springs Farmers' Market	Booster field off of Main St in Willow Springs MO, Willow Springs	19
5	<a href="#">Mountain View Farmers' Market</a>	Pine Street, Mountain View	19.9
6	Oregon County Farmers Market	Alton City Park Tucker Creek Rd. Alton, MO.	32.3

Produce Auction	Location	Distance(miles)
<a href="#">Webster County Produce Auction</a>	1304 Berry Road, Seymour	62
<a href="#">Leadmine Produce Auction</a>	839 State Road T, Tunas	97.8*

## Other Potential Buyers (nearby retail / institutional establishments)

Type of Establishment	Number Within County	Number Within County and Surrounding Counties
Restaurants	29	76
Grocery Stores	12	31
Wholesale Clubs & Supercenters	1	3
Hospitals	2	4
Nursing Facilities	5	15
School Districts, Colleges, Universities	4	10

Source: [U.S. Census Bureau, County Business Patterns: 2012.](#)

# Competitive Analysis

<b>Category</b>	<b>Number of Farms (in county)</b>	<b>Size or Income</b>
Vegetable Farms	9	7 ac.
Berry Farms	12	7 ac.
Noncitrus Fruit	12	37ac.
Orchard Farms	16	60 ac.
Greenhouse Production (horticulture under protection)	(N)	179158 sq. Ft.
Organic Crop Farms	2	(D)
Agritourism Operations	8	\$249000

Source: [USDA Census of Agriculture, 2012.](#)



# Develop a List of Possible Enterprises

- Are there enterprises which interest you that have been successful in other areas in similar soil and climate conditions (i.e., enterprises that have potential in your area but have not yet been established)?
- Which are the enterprise types with which you feel more personally compatible: livestock, field crops, orchard crops, small fruits, vegetables, ornamentals, growing transplants, raising seed?

# Develop a List of Possible Enterprises

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- **What crops or livestock have been raised on your land in the past?**

Ask your neighbors

Ask USDA

Ask seller

# Planning

- It is important to look at the calendar and plan when the enterprises chosen will need labor.

Calving in March

need time and vet

Strawberries in June

4 weeks / U-pick / need labor

Watermelon in July

need labor / restaurant or broker

Plant Strawberries

in August tractor / bed prep / need labor

Plant high tunnel in October

2 weeks / tiller

Pecans in November

3 weeks / need shaker / shelling facility

# Sunflower?

## Oil Market

- Oil is the primary market for U.S.-grown sunflowers, approximately 80-90%. Major buyers include sunflower crushing facilities or elevators located in Kansas or Oklahoma.

## Confection Market

- Confectionery sunflowers are used in baking or directly consumed. Most of the major U.S. confectionery processing plants are located in Kansas, Colorado, South Dakota, North Dakota, Texas and Minnesota.

## Birdseed Market

- In Missouri, the birdseed market is an easy-to-access market for sunflower growers. Producers can sell to a regional birdseed packager, seed company, local retail store or direct to consumers. Some markets bulk or bagged form.
- A buyer at Perryville, Missouri will purchase sunflower. Buchheits packages sunflower seed for birdseed sales.

## More Information

- [Elevators Purchasing Sunflowers](#) (National Sunflower Association)
- [Oilseed Crushers](#)      [Confection Processors](#)      [Buyers of Sunflower Seed for Bird Food](#)

# Fruit

- Require pH between 6.0-6.5 (exception blueberry 5.5)
- Need enough land to establish desired size of orchard
- Water source for summer drought
- Trees can take from 3 to 8 years before crop
- Brambles take 1-3 years
- Cooler sized for storing immediately after picking
- Mower for weed control
- What are known pest issues in your area (SWD and BMSB)
- Quality fruit is not hard to sell, Requires planning

# Fruit

- Apples - 6 to 10 bushel/tree
- Peaches - 4 to 6 bushel/tree
- Figs (dried, fresh) - pounds
- Pears (Asian) - 6 to 10 bushel/tree
- Persimmons - 1 bushel/tree
- Elderberry – 12-15 pounds/shrub
- Mulberry - 10 bushel/tree
- Blueberries - 5,000/acre average 25yr
- Blackberry - 10,000/acre (40,000 HT) 12yr
- Raspberries - inconsistent 12yr
- Grapes - 5 tons/ acre
- Strawberries - 16,000-22,500 pints/acre

# Produce (field, hightunnel)

- General soil pH between 6.0-6.5
- Need land to establish desired size of planting
- Water source for summer drought
- Weed control
- What are pest issues and control measures in your area (disease / insect)
- Need buyer - broker, retail store, restaurant, school, farmers market
- May need cooler for larger harvest
- High Tunnel Cost and Maintenance

# Hightunnel

- Crops in soil under plastic protected from severe/erratic weather
- Use with high yielding & high value produce to pay for space
- Perpendicular to prevailing winds (Typically N/S)
- Space up to 30ft X 200ft - 17ft height
- Avg. materials cost: \$1.00-2.00 per sq. ft
- Accelerate and extend crop growth and maturity 1 month either side
- Increase number of crop cycles (3 crops/yr - 12 month production)
- May need heat source and manual pollination



# Produce (traditional)

- Asparagus
- Beans
- Black-eyed Peas
- Broccoli
- Cabbage
- Carrots
- Cauliflower
- Chard
- Corn (sweet, India)
- Cucumbers
- Eggplant
- Garlic
- Lettuce (baby, leaf, bib types)
- Melons, special
- Okra
- Onions
- Peas(sugar)
- Peppers (bell, chili, ethnic)
- Pumpkins
- Radishes
- Squash (summer, winter - baby, blossoms)
- String Beans (french or Blue Lake)
- Tomatoes
- Turnips
- Watermelons -unusual varieties

# Produce (specialty, herbs)

- Amaranth
- Arugula
- Cactus
- Celeriac
- Chayote
- Collards
- Dandelion Greens
- Endive, chicory, i.e., raddichio, frissee Fennel
- Jerusalem Artichokes
- Kale - colored types
- Leeks – baby
- Mustard Greens, Japanese variety
- Oriental Vegetables (see "Glossary of Oriental Vegetables")
- Parsley
- Parsnips
- Shallots
- Tomatillos

# Livestock

- Know how much land you need to feed each animal (4% of their weight each day) roughly 2 acres / cow
- Source for feed; good cattle farmer is a good forage grower
- Water source
- Will you go to an auction or direct sell (need network)
- Regulations on care by a vet
- What are pest issues

# Livestock

- Beef, natural and grassfed
- Buffalo
- Chickens (eggs for eating, hatching)
- Goats (milk, meat, wool)
- Llamas
- Pigeons (for squab)
- Rabbits (meat, pelts, pets)
- Sheep (meat, wool)
- Trout, farm raised

# Alternative Livestock

- Bees
- Beneficial Insects
- Birds (exotics, game birds)
- Bull Frogs
- Ducks (rare breeds)
- Geese
- Earthworms
- Fish (bait, pets, fingerling stock)
- Ostrich byproducts
- Imu

# Bees

## Pros

- **Honey** for eating
- **Wax** for candles, creams and lipsticks
- **Healthier Landscapes:** for healthier plants and bigger crops
- **Diligent workers:** free labor force produces honey and wax. Plan for a half hour each week and for honey collecting twice a year.

## Cons

- **Non-Natives:** If you're getting bees to pollinate your food (not to farm honey), consider native bees and encourage native plants and wildflowers.
- **Stings happen:** Check if you are allergic to bee stings
- **Cost:** Initial cost is sharp. \$300 to 400 per hive. new hive \$110, clothing and gear \$160, colony bees \$75 to \$100.
- **Pests:** Diseases, parasites and pesticides - take time to learn how to keep bees healthy. What problems do beekeepers have in your area

# Honey and bee products

- Honey = \$.50-\$1.25/oz
- Pollinators = \$150 -\$175/2-5 frame NUCS
- Queen rearing = \$35/1queen
- Wax = \$7/pound
- Soap = \$4/3 oz bar
- Candles = \$1/votive; \$5/7" candle
- LipBalm = \$3-\$5/balm
- Honeystick = \$7/16 sticks

# Ornamental and Nursery Crops

- Must have buyer or vendor before planting or small scale farmers market
- Often plant based on vendors needs
- Need cooler for cut flower storage (van in AC garage)
- May Need cooler for small trees and woody seeds
- Equipment: Tractor, sprayer, mower
- Land for spacing of plants
- What are the pest issues
- What types of plants are wanted

# Ornamental and Nursery Crops

- Cut Flowers (especially varieties not grown by large scale growers)
- Dried Ornamentals for Arrangements
- Nursery Stock (especially rare varieties) takes years to grow trees
- Seasonal Ornamentals (e.g., Indian corn)
- Seedlings (ornamentals, vegetables)
- Turf



# Forestry

- Takes years to establish new before cutting
- Need wooded land to cut for existing timber
- Need land for new planting
- Can be low labor
- Christmas tree farm needs seasonal labor 8-10 weeks
  - Christmas Trees
  - Fuel wood Trees
  - Specialty Lumber Trees
  - Windbreak Trees

# Value added

- Dairy products (cheese, ice cream)
- Plant-based soap
- Compost
- Meat processing facilities
- Baked goods
- Jellies/Jams/Juice
- Canned

# Other

- Fiber Crops
- Hay (small bales)
- Mushrooms (exotic varieties)
- Oil Crops (sunflower, safflower, jojoba)
- Seed (commercial, rare varieties)

# Organic

## Certified vs. Education

- Before obtaining an organic certification make sure there is value in the cost
- Many growers follow organic practices and educate their customers over time
- To recoup the cost of certification you need to sell in a large city or to specific buyer

## Know the Landscape and Neighbors

- Are you surrounded by conventional growers with no protection from drift?

# Other

- Custom Machine Operation
- Farm Management Services
- Specialized Services (sheep shearing/ rice gates)
- Vacation Farms / Ecotourism
- Trucking for Self & Neighbors

# Resources

- <https://www.nass.usda.gov/> - past prices and history of crops database
- <https://newfarmers.usda.gov/> - resources for new farmers
- <https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=MO> - Missouri soil surveys
- <https://www.communitycommons.org/groups/alternative-crops-project-afri/local-food-market-evaluation-tool/> - area market report
- <https://www.communitycommons.org/> - information on your area
- [https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb1097070.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1097070.pdf) - Balancing acres needed per cow

- <https://ag.purdue.edu/btny/midwest-vegetable-guide/Pages/default.aspx> Midwest Vegetable Production Guide for Commercial Growers
- <https://ag.purdue.edu/hla/Hort/Documents/ID-465.pdf> Midwest Fruit Pest Management Guide
- <http://www.ars.usda.gov/Main/docs.htm?docid=9409> USDA Handbook: Commercial Storage of Fruits, Vegetables, and Florist and Nursery Stocks (#66)
- <https://attra.ncat.org/horticultural.html> Sustainable Agriculture - Horticulture Crop Guides
- <http://smallfarms.cornell.edu/2013/08/07/horticulture> Small Farms Program
- <https://www.agmrc.org/commodities-products/fruits/persimmon/> Ag Marketing Resource Center