Case Study

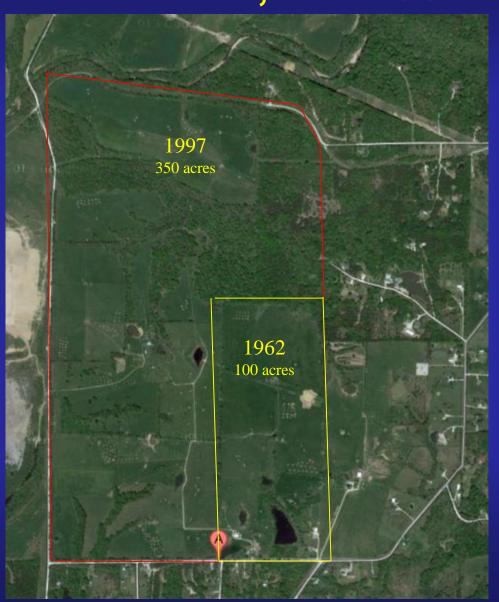
The Martz Farm

Boone County, Missouri

Agroforestry Academy

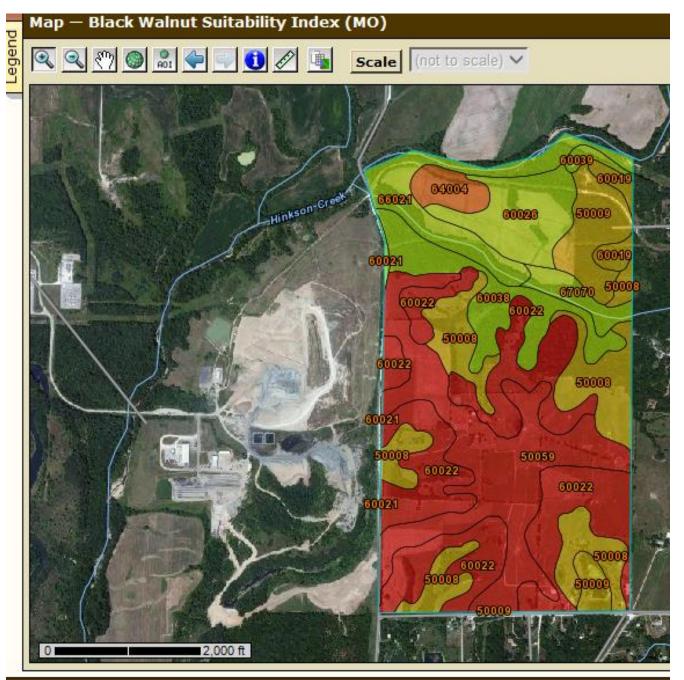
August 5 – 9, 2013

Martz Farm, Est. 1962





Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	^
50008	Keswick silt loam, 5 to 9 percent slopes, eroded	81.3	16.1%	
50009	Keswick silt loam, 9 to 14 percent slopes, eroded	33.2	6.6%	
50059	Mexico silt loam, 1 to 4 percent slopes, eroded	101.2	20.1%	
60019	Hatton silt loam, 2 to 5 percent slopes, eroded	8.0	1.6%	
60021	Lenzburg channery silty clay loam, 9 to 70 percent slopes	1.2	0.2%	
60022	Leonard silt loam, 2 to 6 percent slopes, eroded	140.7	27.9%	
60026	Weller silt loam, bench, 2 to 5 percent slopes	36.0	7.1%	
60038	Rocheport-Bonnefemme complex, 14 to 25 percent slopes	39.4	7.8%	
60039	Rocheport-Bonnefemme complex, 25 to 40 percent slopes	3.7	0.7%	
64004	Auxvasse silt loam, 0 to 2 percent slopes, rarely flooded	11.9	2.4%	
66021	Perche loam, 0 to 2 percent slopes, frequently flooded	36.5	7.2%	
67070	Perche loam, 1 to 3	11.4	2.3%	*



Tables — Black Walnut Suitability Index (MO) — Summary By Map Unit

Background Information to be Presented by Landowner

- Farm Household
- Farm size
- Farm History
- Farm Equipment
- Soils
- Distribution, Uses and Unique Features of Land:
 - ➤ Pasture, Crops, Forest, Riparian Areas
- Landowner Objectives

Martz Family Farm:

- Martz Farm is a family farm operated by Fred & Donna Martz and son Kevin, Fay and Daniel Martz.
- The operation is a partnership between Fred and Kevin.
- The original 100 acres was purchased in 1962 by Fred and his father Joe and later was passed on to Fred and Kevin.
- The adjoining 350 acres was purchased in 1997.
- Fred and Donna grew up in Northeastern Indiana and came to Columbia MO in 1961 when Fred joined the faculty of the U of MO.

The Farm:

- There are four major areas of interest in the operation of the farm.
- 1) Profitability (Kevin is a fulltime farmer)
- 2) Social acceptability
- 3) Environmental friendliness and
- 4) Christian stewardship of God's Creation.

Kevin must make his share of the family living but at the same time we are interested in:

controlling soil erosion, carbon sequestration, community participation, wise use of natural and manufactured resources, etc.

The Farm

Farm Size:

Total acres 450 acres

Open pasture 325 acres

Total animal units 150

Stocking rate
2.25 acres/animal unit

Stock density 8,000 lbs/acre (daily basis)

Stock density 16,000 to 24,000 lbs/acre (grazing period basis)

The Farm:

Enterprises:

Major - Cow/calf, 100 cows

Alternative - Sheep (meat) 35 ewes

Finishing lambs 70

General Background Information:

No. of farm ponds 9

No. of pasture paddocks About 60

Paddock size 4 to 6 acres

Days in each paddock 2 to 3 days

Marketing

- •Beef steers Beef herd has a spring and fall calving herd, about 50 cows each. Calves are weaned at about 7 months of age and are pastured to gain additional weight to about 800 lb. About 20 of the calves are finished on pasture and sold at the local farmers market. The remaining steer calves are sold on the commodity feeder calf market.
- •Beef heifers The heifers are developed as herd replacements. About 50% of the heifers are kept as herd replacements in our herd and the remainder are marketed as bred heifers to other growers.
- •Lamb Lamb is marketed along with beef at the Boone County Farmers Market.

Group Design Exercise for Thursday/Friday

Objectives to consider during the design exercise.

- ✓ Keep these in mind during the visit to the Martz farm.
- ✓ Ask Fred lots of questions.
- 1) What agroforestry practices would you consider recommending to the Martz farm and why?
- 2) In your designs, indicate species and illustrate how the practice might look when laid out on the land.
- 3) Consider what, if any, incentives might the farm family tap to assist them in implementation?
- 4) What economic opportunities might be incorporated into the existing farm operation?

Group Design Exercise for Thursday/Friday

- 5) What can be done to enhance the landowners conservation objectives?
- 6) What barriers exist to getting agroforestry established? Examples:
 - Governmental program barriers;
 - Accessibility to credit, labor, markets or other financial barriers;
 - •Others?
- 7) What are your suggestions for overcoming the barriers to establishing the agroforestry practice(s) you have identified?