

# ECONOMIC IMPORTANCE OF AGRICULTURE TO LOCAL ECONOMIES



AMERICAN FARMLAND TRUST CONFERENCE  
LEXINGTON, KY OCT. 21, 2014



# The Impact of Agriculture on the Economy of Fayette Co., Kentucky

Leigh Maynard

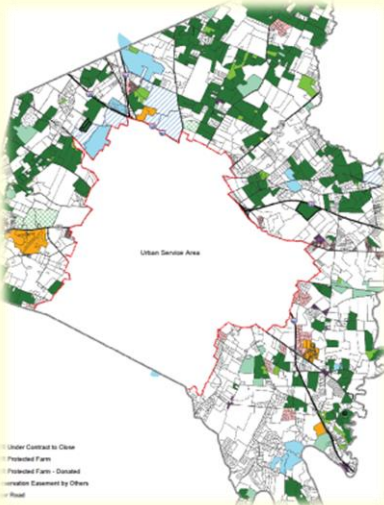
University of Kentucky, Ag Economics



# We were asked ... What is the impact of ag on the Fayette Co. economy?



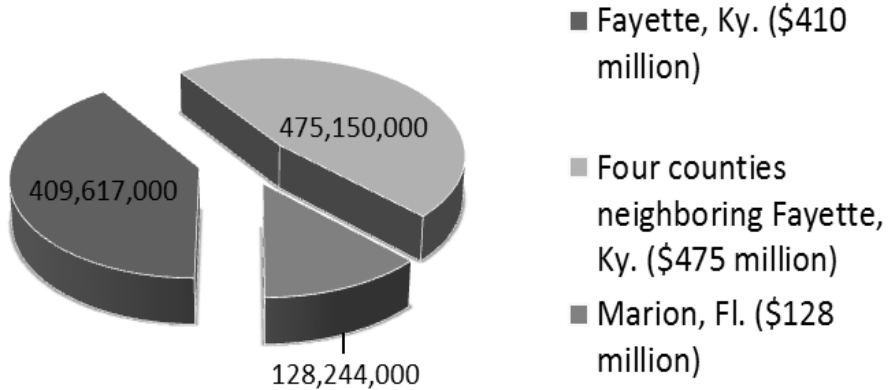
UKAg



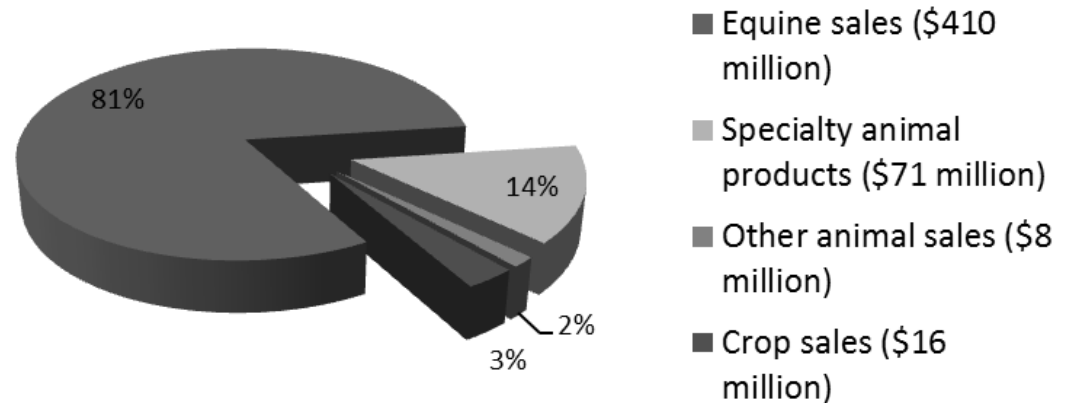
VS.



Fayette County,  
four of its neighbors,  
and Marion County, Fl.  
dominate U.S. equine sales



Sales of horses and  
breeding services  
account for 95% of  
Fayette County ag sales

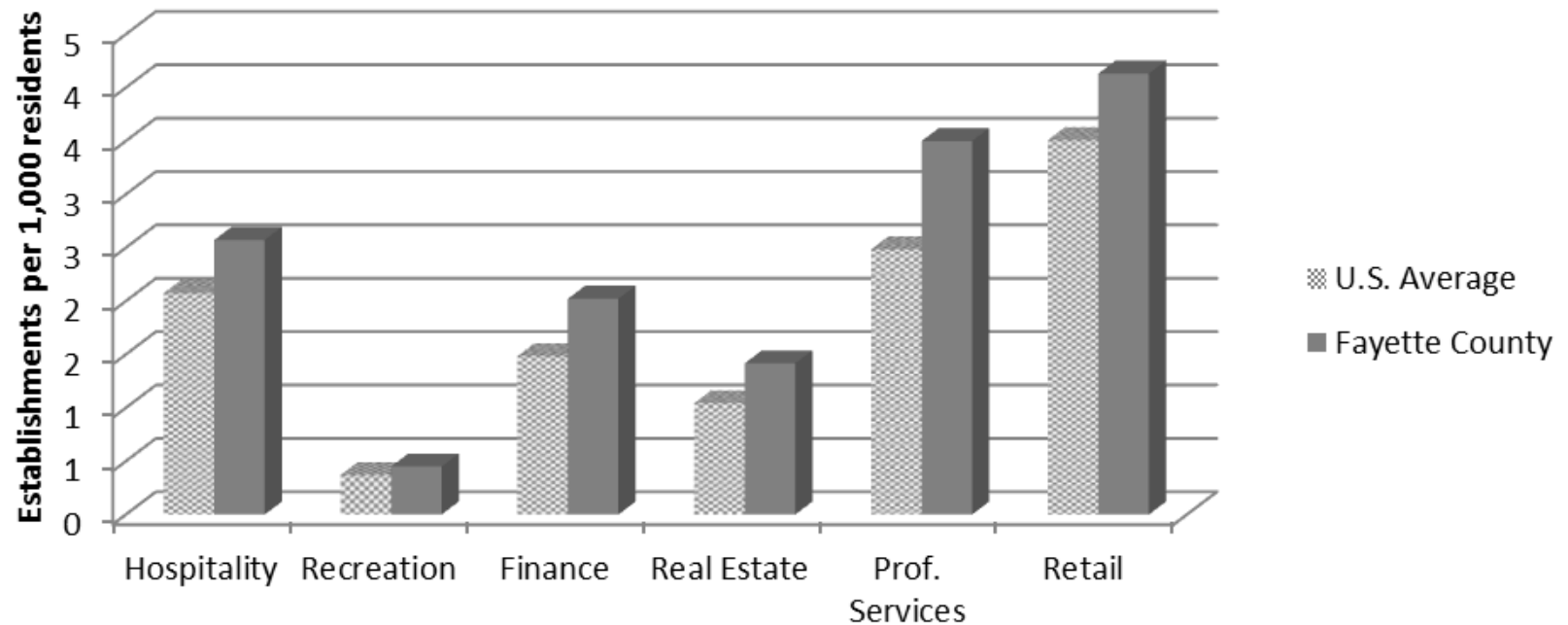


# We narrowed the question to ...

- What impact do equine sales and the presence of horse racetracks have on business activity in 6 other industries?
- Hospitality, Finance, Professional Services, Recreation, Real Estate, Retail
- Sales, Payroll, # of business establishments



On a per capita basis, Fayette Co. has above-average business activity in the 6 selected industries, compared to other U.S. counties with 100,000 – 500,000 people.



# Methods

COUNTY	STATE	N_STATE	F_CNTY	FIFIPS
Baldwin	Alabama	1	3	1003
Calhoun	Alabama	1	15	1015
Etowah	Alabama	1	55	1055
Houston	Alabama	1	69	1069
Lee	Alabama	1	81	1081
Madison	Alabama	1	89	1089
Mobile	Alabama	1	97	1097
Montgomery	Alabama	1	101	1101
Morgan	Alabama	1	103	1103
Shelby	Alabama	1	117	1117
Tuscaloosa	Alabama	1	125	1125
Anchorage	Alaska	2	20	2020
Cochise	Arizona	4	3	4003

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data fayetteonly;
set fayette1 where fayette=1;

proc means data=fayetteonly;
var equaldbl track agentab mansal unemp pove houseva time pop natind
crimrate housin taxhom wateracrespercap urbanacrespercap
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hosppayroll recpayroll finpayroll realpayroll profpayroll retailpayroll
hospalpercap recsalpercap finsalpercap realsalpercap
profalspercap retailsal consal conpay;
run;

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urbanacrespercap lnunemp lnrove lnhouseva time lnpopk natind crimrate
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urbanacrespercap lnunemp lnrove lnhouseva time lnpopk natind crimrate
lnhousein lntaxhom/dist=negbin;
proc genmod data=fayette1;
run;

```

- 18 regressions on 442 county-level observations nationwide
- Dependent variables are 3 measures of business activity in 6 industries
- OLS for sales and payroll, negative binomial for # of business establishments (overdispersion)
- Log-linear for sales and payroll (Box-Cox test)
- Primary independent var. are ln(Equine Sales) and Racetrack dummy
- Marginal effects presented as % and \$ changes (e.g., equine sales elasticity estimate applied to Fayette Co. real estate sales to get \$ impact)
- Only report impacts significant at 10% level

Statistics

## Other factors we controlled for

	U.S. Average	Fayette County
Unemployment rate	8.47%	7.20%
Percent below poverty level	14.72%	20.40%
Housing value	\$ 181,086	\$ 161,900
Commuting time (minutes)	23.59	19.50
Population	211,417	295,803
Natural amenity index	3.67	2.00
Household income	\$ 64,753	\$ 68,846
Real estate tax rate	1.04%	0.86%
Water acres per capita	0.06	0.00
Urban acres per capita	0.24	0.22

# Results – Impact of Equine Sales

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A 10% increase in equine sales leads to ...

- 0.5 more recreational establishments

- 1 more financial establishment

- 1 more real estate establishment

- 7 more professional services establishments

- a 1% increase (\$5.6 million) in professional services payroll

- a 1% increase (\$26.3 million) in professional services sales

- a 1% increase (\$5.2 million) in real estate sales

- a 0.3% increase (\$13.6 million) in retail sales

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Take-home message: a \$40 million increase in equine sales produces more than \$40 million of additional sales in other industries.

# Results – Impact of Racetrack

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The presence of a racetrack in a county leads to ...

- 15 more recreation industry establishments

- a 10% increase (\$25.2 million) in hospitality payroll

- a 42% increase (\$23.8 million) in recreation industry payroll

- an 8% increase (\$38.5 million) in retail payroll

- a 45% increase (\$74.4 million) in recreation industry sales

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Take-home message: The equine industry itself does not employ many people or generate much in payroll taxes, but the industries that accompany equine do.

# Results – Comparison to Impact of Manufacturing

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A 10% increase in manufacturing sales leads to ...

- 3 more financial establishments

- 1 fewer real estate establishments

- an 8% increase (\$0.5 million) in recreation industry payroll

- a 2% increase (\$1.2 million) in retail payroll

- a 5% increase (\$23.3 million) in retail sales

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Take-home message: Manufacturing expansion is beneficial, but the benefits are mostly confined to manufacturing, whereas benefits of expanding equine sales and horseracing are spread across several industries.

# Interviews and IMPLAN analysis tell a similar story

- “When Toyota moved to central Kentucky ... it was important because of all the ancillary businesses that came here ... The horse farms are like Toyota, there are a lot of other businesses here because of the horse farms.”
- “Without our landscape, we have no hook to differentiate ourselves from other small cities in the Midwest or the Southeast.”
- “These don’t necessarily affect our business directly, but they are factors in our ability to attract and retain talented employees.”
- Fayette Co. ag business directory created and used to customize IMPLAN analysis: **1 in 9 jobs directly or indirectly attributable to ag**

# How the Results Were Used



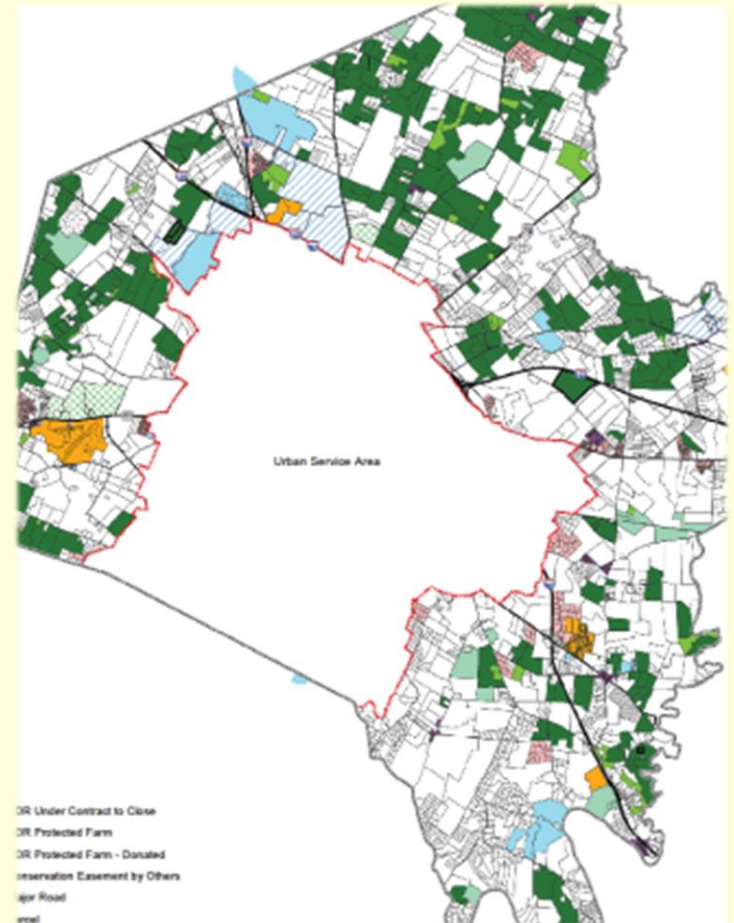
LEXINGTON  
**HERALD-LEADER**

 **BusinessLexington**  
A PARTNER IN PROGRESS

- Used by Fayette Alliance and Fayette County Kentucky Farm Bureau for farmland preservation advocacy
- Complements Bluegrass Econ. Advancement Movement (BEAM) and KY Equine Survey reports
- Ag Cluster is important part of diverse local economy

# Policies for rural farmland preservation

- Urban Service Boundary
- Purchase of Development Rights Program



# Policies to encourage urban agriculture

- Urban Agriculture Overlay District  
(e.g., Cleveland)
- Zoning changes  
(e.g., Boston)
- Workshops, webinars,  
training programs







**SARAH FRITSCHNER AND ASHTON  
POTTER WRIGHT**







B L U E G R A S S

F A R M - T O - T A B L E

*Growing Our Local Food Economy*

# Supporting local agriculture & food production

- Increases farm income and jobs
- Keeps money in the region
- Supports local businesses

## HERE'S THE IDEA

Buying local products at locally owned businesses keeps money circulating closer to where you spend it. This creates a ripple effect as those businesses and their employees in turn spend your money locally. Corporate chains send most of your money out of town.



**For every \$1 spent  
at a local business ...**



**For every \$1 spent  
at a corporate chain ...**



# Funders





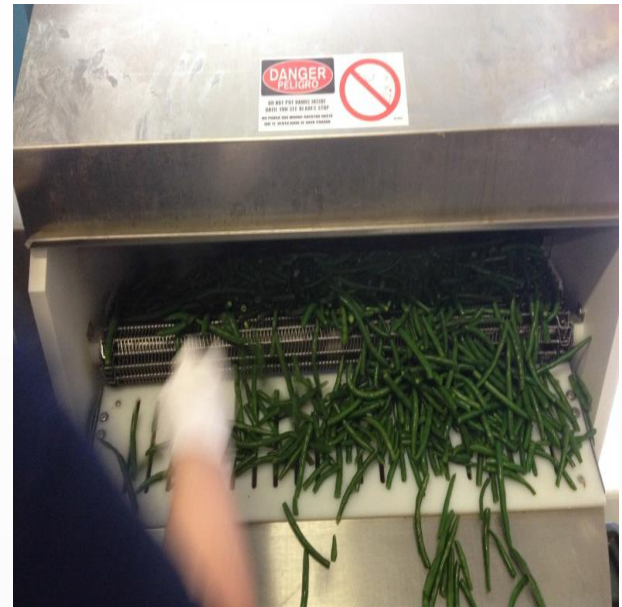
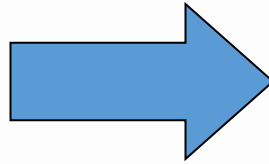
Access = “The point at which people purchase their food at places like farmstands, markets, or restaurants.”

Company	Sales (in billions)
Kroger	\$ 96.8
Safeway	44.2
Sysco	42.4
Tyson	33.3
Publix	27.7
McDonald' s	27.6
Plus the others, including Kraft, Olive Garden etc.	\$510 billion total

# Estimated farmers market sales 2013

**\$1.5 billion**

<http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5080175>







Jan Sneegas,  
director, General  
Assembly and  
conference  
services,  
Unitarian  
Universalist  
Church



*An economy genuinely local and neighborly offers to localities a measure of security that they cannot derive from a national or a global economy controlled by people who, by principle, have no local commitment.—Wendell Berry*



**JIM MANSFIELD**



## **Four Hills Farm, LLC**

Family Farm -home place in Salvisa, KY

We raise Katahdin sheep on pasture, no feed lots, no antibiotics or hormones used. We market high quality lamb to a foodie, gourmet customer base at upscale grocers and butcher shops.

# How did we get started?



2002 Purchased  
Salvisa Farm

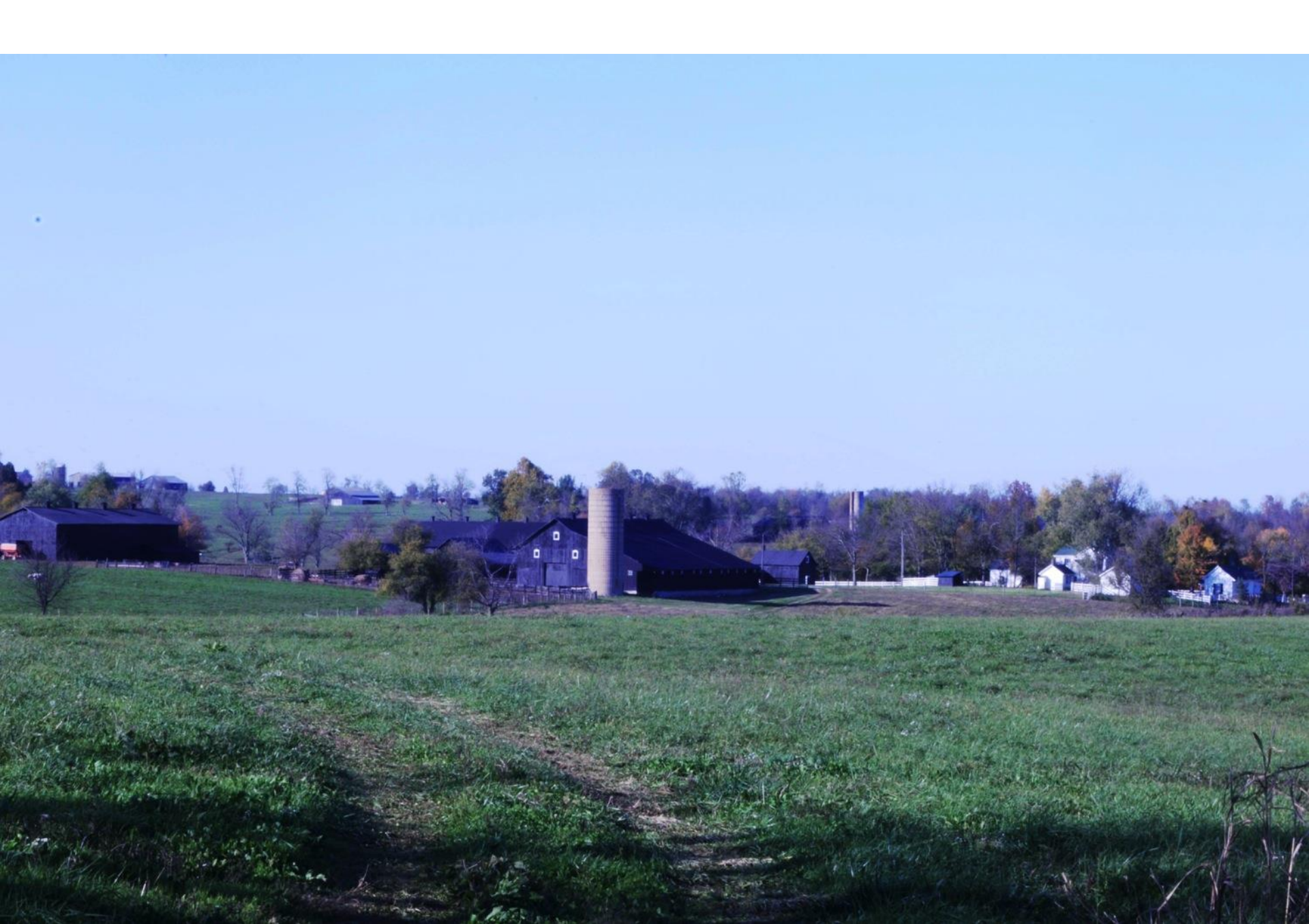
2004 Purchased 25  
ewe lambs

Good fit for farm &  
personnel

Excellent quality  
lamb

2009 First wholesale  
sales















Sheep are Noble Creatures!







24 Hour Security Service

# Can you say: Value-added!

2009 First store promotion:  
Louisville Whole Foods Market



Kroger 2010



So far > \$1.5 million in lamb sales

# Store Demos Work!!!!



# Affecting the Local Economy



- 15-20 other farms are raising lambs for us in Kentucky, Tennessee, Virginia, and Indiana
- Sheep born, raised, processed, distributed and marketed all within 400 miles
- Using renewable forage resource
- Rotational grazing = recycling nutrients
- Local \$ spend on :
  - livestock
  - Farm purchase or lease pymts
  - Employees
  - Vets
  - Feed
  - Farm supplies
  - equipment



# We could lease our farm for row crops and tobacco and get more money...but

“Although maximizing the income from our farmland is very important to us, we have learned through generations of farm ownership and various operations, that the value of farmland is about so much more than income alone”.

“Mid-sized farms like ours provide products, opportunities, and benefits that are indispensable to the long-term health and well being of people and communities, both now and in years to come.”

Jane (Kubale) Rutherford, et al

It takes infrastructure: BARNS



But it takes infrastructure: BARNS



It takes infrastructure: Working facilities



It takes infrastructure: Fences



It takes infrastructure: WATER



# Four Hills Farm

We have:

- A quality product
- A renewable resource base (forages)
- Animals suited to the environment and small to mid-sized farms
- A market opportunity (40% of American have never eaten lamb)
- A growing awareness that local makes a difference

## Have a Nice Day!!

