

Cattle Operation and Woodlands Management Survey

Q1. Did you own farm land OR raise cattle in 2012? Check one.

Table Q1 Raise Cattle or Not in 2012

	Yes	No
Raise Cattle	2214 (94.09%)	139 (5.01%)

Q2. How many total acres did you farm in 2011 and how many of these acres were rented from someone else?

Table Q2 Acres Farmed by Type

Type	Mean of Total Acres Farmed (Acres)	Mean of Acres Rented (Acres)
Pasture	282.28	96.16
Hay	56.29	20.46
Harvested Cropland	136.18	47.11
Woodland (Grazed)	30.73	6.49
Woodland (Not Grazed)	28.50	1.91
Other	8.09	0.86

Q3. If you rented land from others, how long were the rental terms?

Table Q3 Length of Rental Term

	Mean (Years)
Length of Rental Term	6.14

Q4. How much farmland and woodland did you own, but rent to others in 2012?

Table Q4 Acres of Owned Lands Rented to Others in 2012

	Mean (Acres)
Lands Rent to Others	39.84

Q5. Did you have any of the following types of livestock on your farm in 2012? Check all that apply.

Table Q5 Types of Livestock on Farm in 2012

Type	Percentages in 2012
Hogs	3.84%
Goats/Sheep	5.16%
Poultry	7.00%
Horses	17.34%
Cattle	93.95%

Q6. How many of the following types of cattle were in your care on January 1, 2013?

Table Q6 Number of Cattle in Care on January 1, 2013

Type	Mean (Heads)
Brood Cows	50.01
Backgrounded Calves	12.69
Stockers	9.94
Replacement Heifers	8.83
Bulls	2.79
Dairy Cows	0.61
Other	2.05

Q7. Did your cattle graze on pasture owned or rented by you in 2012?

Table Q7 Cattle Graze on Pasture Owned or Rented by Respondent in 2012

	Yes	No
Owned or Rented	1792 (93.15%)	325 (6.85%)

Q8. About how many days per year do you graze your cattle?

Table Q8 Number of Days per Year Spent on Grazing Cattle

	Mean (Days)
Days on Grazing Cattle	298.05

Q9. Which of the following pasture management practices do you use? Check all that apply.

Table Q9 Types of Pasture Management Practices in Use

Type	Percentages
Apply Manure as Fertilizer to Pastures	40.95%
Apply N,P, or K Fertilizer (DAP, UREA, LAN, etc.) to Pastures	49.84%
Water Cattle at Site Other than Stream or Pond	60.02%
Have Buffer Strips of Woody or Grassy Vegetation along Waterways	34.45%
Have Shade Structures, Scratching Posts, and Feed Supplements Placed away from Streams	57.75%
Have Improved Stream Crossings	18.39%
Control Livestock Access to Streams	20.35%
Protect Heavy Use Areas with Geotextiles	8.64%
Replant Bare Pasture with Legumes or Native Grasses	40.81%
Periodically Test Soil	48.67%

Q10. Do you currently own land you have afforested or are in the process of afforesting?

Table Q10 Own Land have Afforested or in the Process of Afforesting

	Yes	No
Afforestation	161 (8.07%)	1835 (91.93%)

Q11. The following table provides cost estimates (by region) for the establishment and maintenance of afforested land. Please review the cost estimates for your region before answering the questions below. We realize that these costs will vary depending on where you purchase the materials.

<i>Region</i>	<i>Establishment Costs/Acre (Year 1)</i>	<i>Maintenance Costs/Acre (Year 2)</i>	<i>Maintenance Costs/Acre (Avg. in Years 3-10)</i>
<i>Appalachia</i>	\$300	\$84	\$49
<i>Corn Belt</i>	\$304	\$87	\$49
<i>Delta</i>	\$300	\$84	\$49
<i>Lake</i>	\$303	\$87	\$49
<i>Northeast</i>	\$300	\$84	\$49
<i>Northern Plains</i>	\$303	\$86	\$49
<i>Southeast</i>	\$260	\$116	\$49
<i>Southern Plains</i>	\$302	\$82	\$49

^a **Northeast:** CT, DE, ME, MD, MA, NH, NJ, NY, PA; **Lake States:** MN, WI, MI; **Corn Belt:** IL, IN, IA, MO, OH; **Northern Plains:** KS, NE, ND, SD; **Appalachia:** KY, NC, TN, VA, WV; **Southeast:** AL, FL, GA, SC; **Delta:** AR, LA, MS; **Southern Plains:** OK, TX

^b The example fast growing woody crop is hybrid poplar for all regions but the Southeast which is pine. Based on US Billion Ton Update (Oak Ridge Natl Lab.).

^c Forest establishment costs include cuttings, plantings, machinery, fertilizer, and chemicals; Maintenance costs in year 2 include cultivation, fertilizer, and herbicide; Maintenance costs in years 3 to 10 include cultivation and fertilizer.

Which of the following best describes whether you would adopt or expand afforestation? Check one answer.

Table Q11 Whether to Adopt or Expend Afforestation or Not

Type	Percentages
Not Adopt or Expand if it was Profitable	71.20%
Would Adopt or Expand Even if it was Not Profitable	4.13%
Would Adopt Only if it was Profitable	24.67%

Q12. We are now going to ask you about a HYPOTHETICAL PROGRAM to encourage farmers and ranchers to adopt or expand afforestation of pastureland. Assume the program would:

- Pay 75% of the costs of purchasing and installing the components needed to begin afforestation on pastureland acres on your farm or ranch;
- Pay you continuing annual payments for 10 years if you follow all of the practices described in the box on page 4 and document these practices each season;
- Not limit the number of acres you can enroll; and
- Be limited to acres not enrolled in another conservation program.

Would you be willing to convert acreage on your farm to forestland for a 10 year period if you were offered a) the 75% installation cost share described above and b) an ANNUAL payment of \$60 per acre for each of the 10 years you practice afforestation?

Table Q12 Whether to Adopt Afforestation with Incentives

	Yes	No
Adopt Afforestation	283 (48.13%)	305 (51.87%)

Q13. If yes, how many acres would you afforest?

Table Q13 Number of Acres to Afforest

	Mean (Acres)
Lands to Afforest	77.93

Q14. After adopting afforestation, how will the number of cattle change on your farm?

Table Q14 Change of Number of Cattle on Farm after Adopting Afforestation

	Yes	Mean Change By
Decrease	105 (36.46%)	42.36%
No Change	171(59.36%)	
Increase	12(4.17%)	33.64%

Q15. In 2012, did you receive payments for afforesting land through a government program, such as the Conservation Reserve Program (CRP) or Environmental Quality Incentives Program (EQIP)?

Table Q15 Received Payments for Afforestation through Government Programs in 2012

	Yes	No
Received Payments	36 (12.24%)	258 (87.76%)

Answer Q16-Q21 Only if Payments for Afforestation are Received

Q16. How many acres did you manage as afforested land under this program in 2012?

Table Q16 Number of Acres Managed as Afforested Land under this Program in 2012

	Mean (Acres)
Afforested Land	48.98

Q17. Did you receive a per acre annual payment in 2012 to maintain the afforested land?

Table Q17 Received Annual Payment per Acre in 2012 to Maintain the Afforested Land

	Yes	No
Received per Acre Payment	25 (73.53%)	9 (26.47%)

Q18. What per acre annual payment did you receive in 2012?

Table Q18 Annual Payment Received per Acre in 2012

	Mean (\$)
Annual Payment per Acre	108.21

Q19. Did you receive any cost share for expenses you incurred to begin afforestation?

Table Q19 Received Cost Share for Expenses Incurred to Begin Afforestation

	Yes	No
Received Cost Share	24 (72.72%)	9 (27.28%)

Q20. Approximately how much did you receive as a cost share for adopting afforestation?

Table Q20 Amount Received as a Cost Share for Adopting Afforestation

	Mean (\$)
Amount Received	3,257

Q21. In what year did you receive the cost share?

Table Q21 Year Received the Cost Share

Year	Percentages
1989	4.55%
1994	4.55%
1997	9.09%
1998	4.55%
2001	4.55%
2002	4.55%
2004	9.09%
2005	4.55%
2006	4.55%
2008	4.55%
2009	9.09%
2010	13.64%
2011	9.09%
2012	13.64%

Answer Q22-Q36 if Graze Cattle

Q22. How important were the following in determining your decision to participate in the program for afforestation?

Table Q22 Importance of the Following in Determining the Decision to Participate in the Program for Afforestation

	Not at all Important	Somewhat Unimportant	Not Sure	Somewhat Important	Extremely Important
Amount of Time / Labor Required to Convert Land and Manage Forestland	463 (27.79%)	97 (5.82%)	350 (21.01%)	335 (20.11%)	421 (25.27%)
Attitudes of Friends and Other Farmers toward Converting Land to Forest	860 (52.60%)	189 (11.56%)	383 (23.43%)	138 (8.44%)	65 (3.98%)
Availability of Extension or Forestland Management Education	536 (33.05%)	141 (8.69%)	437 (26.94%)	351 (21.64%)	157 (9.68%)
Investment Cost of Converting Land to Forest	413 (25.21%)	88 (5.37%)	284 (17.34%)	306 (18.68%)	547 (33.39%)
Amount of Paperwork Required to Participate in the Program	412 (25.17%)	94 (5.74%)	327 (19.98%)	335 (20.46%)	469 (28.65%)
Effect on Your Farm's Ability to Offset Carbon Emissions	528 (32.55%)	142 (8.75%)	564 (34.77%)	258 (15.91%)	130 (8.01%)
Your Level of Knowledge about Afforestation Practices	421 (26.00%)	133 (8.21%)	501 (30.95%)	378 (23.35%)	186 (11.49%)
Limitations on End Uses of Timber Harvested	439 (27.00%)	116 (7.13%)	405 (24.91%)	317 (19.50%)	349 (21.46%)
Per Acre Program Payment Offered for Converting Land to Forest	437 (26.83%)	85 (5.22%)	344 (21.12%)	281 (17.25%)	482 (29.59%)
Impact of Adopting Afforestation on the Environment	450 (27.73%)	118 (7.27%)	451 (27.79%)	404 (24.89%)	200 (12.32%)

Q23. How likely do you believe participating in the afforestation program would be to:

Table Q23 Likelihood You Believe Participating in the Afforestation Program Would be to

	Highly Unlikely	Somewhat Unlikely	Not Sure	Somewhat Likely	Highly Likely
Increase the Profitability of Your Farming Operation	763 (43.83%)	260 (14.93%)	457 (26.25%)	191 (10.97%)	70 (4.02%)
Reduce the Amount of Soil Erosion on Your Farm	490 (28.59%)	256 (14.94%)	382 (22.29%)	440 (25.67%)	146 (8.52%)
Improve Water Quality in the Streams on or Near Your Farm	487 (28.38%)	243 (14.16%)	412 (24.01%)	429 (25.00%)	145 (8.45%)
Improve the Appearance of Your Farm	572 (33.31%)	255 (14.85%)	396 (23.06%)	368 (21.43%)	126 (7.34%)
Improve Wildlife Habitat on Your Farm	405 (23.57%)	161 (9.37%)	305 (17.75%)	565 (32.89%)	282 (16.41%)
Free up Land for Other Agricultural Uses	752 (44.00%)	269 (15.74%)	510 (29.84%)	120 (7.02%)	58 (3.39%)
Improve the Quality and Amount of Forage Produced on Your Farm	707 (41.66%)	278 (16.38%)	434 (25.57%)	185 (10.90%)	93 (5.48%)
Increase Your Supplemental Feed Costs to Support More Cattle	562 (32.81%)	226 (13.19%)	422 (24.64%)	260 (15.18%)	243 (14.19%)

Q24. Years as primary farm business decision maker?

Table Q24 Years as Primary Farm Business Decision Maker

	Mean (Years)
As Decision Maker	31.95

Table Q24 Age in Years

	Mean (Years)
Age	63.81

Q25. Which of the following best describes your farming business?

Table Q25 Type of Farming Business

Type	Percentages
Sole Proprietorship	76.89%
Partnership	12.28%
Corporation	3.17%
Other	4.86%

Q26. What is your highest level of education?

Table Q26 Highest Level of Education

Type	Percentages
Less than High School	7.59%
High School Graduate	37.26%
Some College	22.51%
College Degree or Higher	32.64%

Q27. Which category best reflects your total taxable household income from both farm and non-farm sources for 2012? Check one answer. Please know that laws prohibit us from sharing your personal information.

Table Q27 Total Taxable Household Income from Both Farm and Non-farm Sources in 2012

Income Level	Percentages
Less than \$10,000	4.73%
\$10,000 to \$29,999	15.34%
\$30,000 to \$49,999	19.61%
\$50,000 to \$99,999	36.04%
\$100,000 to \$149,999	12.63%
\$150,000 to \$199,999	5.29%
\$200,000 to \$499,999	4.68%
\$500,000 or more	1.70%

Q28. What percent of the total taxable household income (both farm and non-farm sources) for 2012 do you estimate came from farming?

Table Q28 Estimated percent of the Total Taxable Household Income from Farming in 2012

	Mean (Percentages)
Estimated Income from Farming	33.36%

Q29. What percent of your 2012 farm income do you estimate came from your cattle operation?

Table Q29 Estimated percent of Farming Income from Cattle Operation in 2012

	Mean (Percentages)
Estimated Income from Cattle Operation	33.84%

Q30. On average, how many hours a week do you spend working:

Table Q30 Average Working Hours per Week

Type	Mean (Hours)
Work on Farm	32.34
Work off Farm	21.74

Q31. How many hours of hired labor do you usually use on your farm in a week?

Table Q31 Number of Hours that Hired Labor Used on Farm per Week

	Mean (Hours)
Hired Labor on Farm	8.67

Q32. Have you participated in any of the following government programs? Check all that apply.

Table Q32 Participation in Government Programs

Type	Percentages
Conservation Reserve Program (CRP)	21.62%
Grassland Reserve Program (GRP)	5.16%
State Programs	14.11%
Other	4.55%

Q33. How many Extension or other educational workshops did you attend in 2011?

Table Q33 Number of Extension or other Educational Workshops Attended in 2012

	Mean No.
Workshops Attended	0.89

Q34. Please indicate the extent to which you disagree or agree with each of the following statements.

Table Q34

	Strongly Disagree	Somewhat Disagree	No Opinion	Somewhat Agree	Strongly Agree
For me, Farming is Not only a Business it is a Way of Life	79 (3.53%)	64 (2.86%)	205 (9.16%)	541 (24.17%)	1349 (60.28%)
I tend to Wait until Others Have Adopted New Technologies or Practices before I Adopt Them	318 (14.57%)	431 (19.74%)	638 (29.23%)	653 (29.91%)	143 (6.55%)
The Government should Offer Incentives to Farmers to Adopt Conservation Practices	244 (11.11%)	205 (9.34%)	508 (23.13%)	677 (30.83%)	562 (25.59%)
I am Concerned that Climate Change will Negatively Impact the Yield of my Product	342 (15.55%)	257 (11.68%)	614 (27.91%)	561 (25.50%)	426 (19.36%)
As a Farmer, I am a Steward of the Land I Farm and it is my Obligation to Protect it for Use by Future Generations	80 (3.59%)	17 (0.76%)	110 (4.93%)	352 (15.78%)	1672 (74.94%)

Q35. Which of the following best describes your plans for your farming operation?

Table Q35 Best Describes Plans for Farming Operation

Type	Percentages
Your Children/Grandchildren will Farm Your Land after You Cease Farming	58.85%
Your Land Will be Sold or Leased to Another Farmer after You Cease Farming	19.50%
Your Land will be Sold for Development after You Cease Farming	13.31%
Other	8.34%

Q36. Do you use the Internet to make farm purchases or farm management decisions?

Table Q36 Use Internet to Make Farm Purchases or Farm Management Decisions

	Yes	No
Use Internet	740 (36.19%)	1305 (63.81%)

Please return the completed survey to us in the enclosed, postage-paid envelope.

Thank you for participating in this study. If you are interested, please check the following website, <http://beag.ag.utk.edu/>, for a summary of results in the coming months.