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Online Supplementary Appendix

Title: AEPP appendix for “Farmer Preferences for Agricultural Soil Carbon Sequestration Schemes”

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Note: The material contained herein is supplementary to the article named in the title and published in the journal *Applied Economic Perspectives and Policy* (AEPP).

APPENDIX A: Survey Respondent Demographics Compared to the State and Nation

Characteristic	<i>n</i>	Sample %	NASS Indiana %	NASS US %
Age				
18-25 years (NASS: under 25)	7	0.99	0.70	0.5
26-35 years (NASS: 25-34)	25	3.52	6.80	4.8
36-45 years (NASS: 35-44)	64	9.01	15.10	12.1
46-55 years (NASS: 45-54)	174	24.51	27.60	25.6
56-65 years (NASS: 55-64)	202	28.45	24.60	27.0
66-75 years (NASS: 65 and older)	155	21.83	25.20	29.7
76 and older	83	11.69		
Region (Indiana crop reporting district)				
Northwest	93	13.09	13.84	
North Central	82	11.54	12.31	
Northeast	93	13.09	10.92	
West Central	67	9.43	11.72	
Central	122	17.18	20.17	
East Central	58	8.17	8.86	
Southwest	97	13.66	13.50	
South Central	55	7.74	4.42	
Southeast	43	6.05	4.27	
Total Acres (Hectares) as of July 1, 2010				
1-99 (1-40)	177	24.96	62.7	54.4
100-499 (41-202)	270	38.08	24.7	31.0
500-999 (203-404)	102	14.38	6.2	6.8
1,000-1,999 (405-809)	90	12.69	4.3	4.2
Greater than 2,000 (greater than 810)	70	9.87	2.1	3.6

Note: Number of observations used to estimate choice models may differ from totals due to unbalanced number of responses to each choice set by each respondent. Gramig, Barnard and Prokopy (2013) report additional farm demographics with farmers' climate change beliefs. _____

APPENDIX B: CHOICE EXPERIMENT DEFINITIONS

Tillage practice

No-Till: Greater than 30% of the soil remains covered in crop residue after planting. This category includes the technique more commonly known as strip-till, in addition to true no-till.

Conservation Tillage: 15-30% of the soil remains covered in crop residue after planting. This category includes techniques more commonly known as mulch-till & ridge-till.

Conventional Tillage: Any tillage system leaving less than 15% crop residue coverage after planting. This category includes the use of chisel and moldboard plows and typically involves multiple tillage trips per year.

Increase in net revenue (compared to conventional tillage)

This describes the change in net revenue (\$) per acre from adopting the tillage practice described above. It includes any fuel and labor savings, additional pesticide input costs, equipment overhead savings, and carbon payment received.

\$0/acre

\$5/acre

\$10/acre

Carbon payment

Commodity market: Proposed legislation would create a commodity market for soil carbon and payments to farmers would be based on the tillage practice they adopt.

Government program: Payments to farmers would be similar to existing conservation program payments from the government.

None: No carbon payment is made to the farmer under the stated tillage.

Multi-year contract requirement

Contract required: A multi-year contract is required for this alternative.

No contract required: No contract is required for this alternative.

Note about Conventional Tillage option:

Note that the characteristics of each no-till or conservation tillage option are expressed relative to the conventional tillage option. Under conventional tillage there is no market or government payment for carbon stored in agricultural soils, and there is no required contract.

It is important that you make your selections like you would if you were actually facing these choices in making farm management decisions.

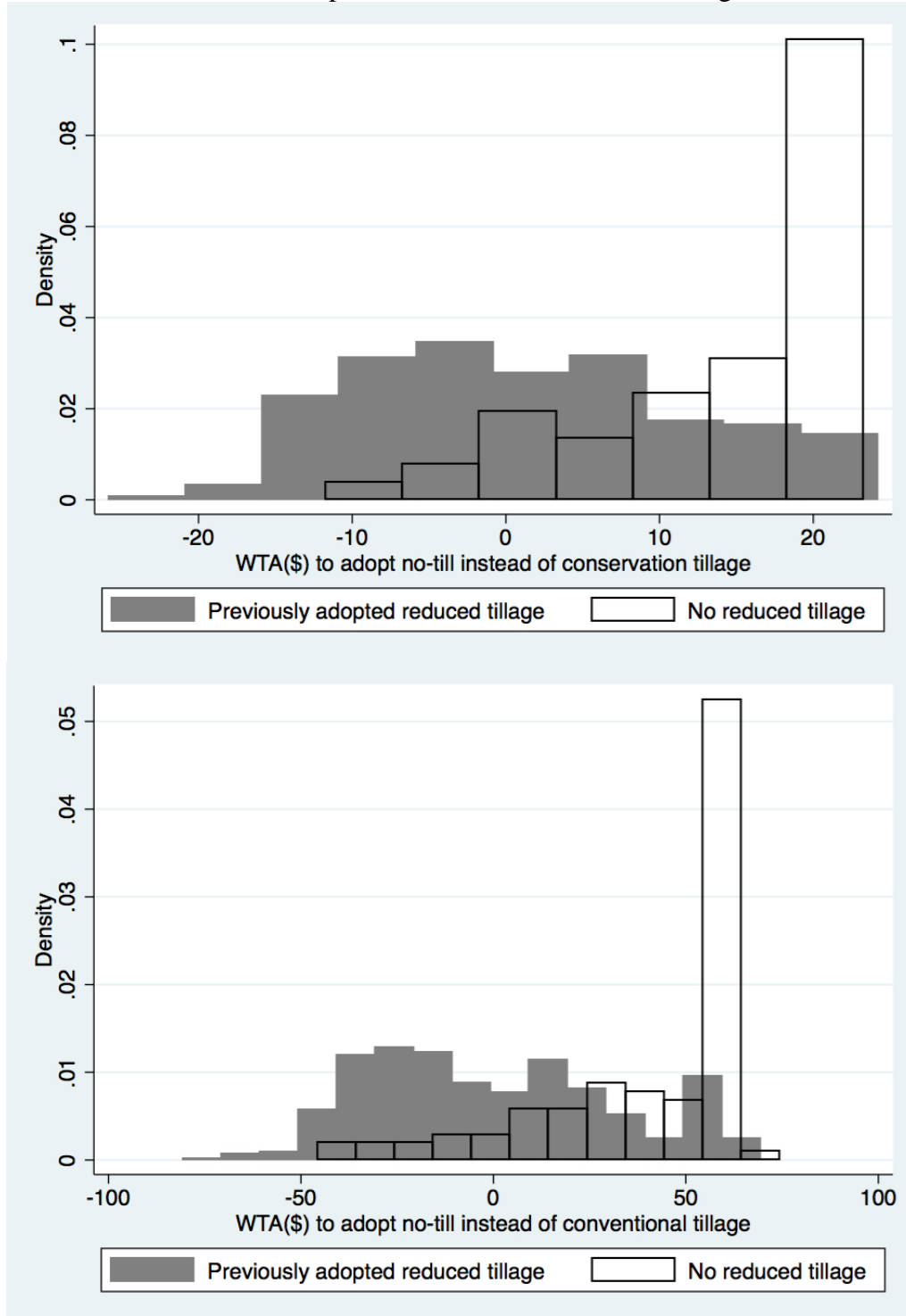
APPENDIX C: EXAMPLE CHOICE SET

If these were your only tillage practice options, which one would you choose?

<u>Attribute</u>	<u>Option 1</u>	<u>Option 2</u>	<u>Option 3</u>
Tillage Practice	Conservation Tillage	No Tillage or no-till	
Increase in net revenue	\$0/acre	\$5/acre	
Source of carbon payment	Government	Cap-and-trade market	
Multi-year contract requirement	Contract required	No contract required	
I Choose:	—	—	—

Appendix D: Distribution of individual willingness to accept given prior adoption of reduced tillage

Note: Based on individual-specific coefficients estimated using the RPL model



APPENDIX E: Split sample estimation results used to conduct complete combinatorial test (Poe et al. 2005)

Mean willingness to accept estimates, 95% confidence intervals and statistical test of difference between MWTA of each group

Variable	Respondents who <i>have not</i> adopted any form of reduced tillage (n=103)		Respondents who <i>have adopted some</i> form of reduced tillage on their farmed acres (n=545)		P-Value Comparing WTA ^b
	Mean MWTA estimates	95% confidence interval ^a	Mean MWTA estimates	95% confidence interval ^a	
Conservation Tillage	\$9.97	(\$6.02, \$14.83)	\$0.42	(-\$1.14, \$2.00)	0.0000
Conventional Tillage	\$33.97	(\$25.96, \$45.07)	\$1.11	(-\$1.11, \$3.20)	0.0000
Contract	-\$5.61	(-\$9.54, -\$1.83)	-\$10.48	(\$-12.36, -\$9.33)	0.0089
Government payment	-\$0.33	(-\$5.67, \$5.71)	-\$2.26	(-\$3.64, \$0.97)	0.2589
Cap-and-trade market payment	-\$13.77	(-\$22.48, -\$6.08)	-\$10.89	(-\$13.11, -\$8.84)	0.7333

^a Confidence intervals found using the Krinsky-Robb method (Krinsky and Robb, 1986).

^b Complete combinatorial test (Poe et al. 2005): p-value ≤ 0.05 indicates statistically significant difference at the 5% level