

This supplemental material appendix accompanies the article "Potential Supply of Midwest Cropland for Conversion to In-Field Prairie Strips." It contains 21 tables and 4 figures that offer background details on the following topics:

- Representativity of the 2018 Crop Management and Stewardship Practices (CMSP) survey compared to the 2017 U.S. agricultural census (Table A1).
- Experimental design and contingent valuation questions (Table A2, Figure A1).
- Factor analysis – exploratory results (to compare with confirmatory factor analysis in the article) (Tables A3-A4).
- Survey weights (Table A5).
- Comparison of accepted vs. rejected prairie strip bid offers:
  - By explanatory variable (Tables A6-A9)
  - By state and bid level (A10-A14)
- Choice of model tests covering unweighted vs weighted observations, logit vs probit estimation, and five alternative sets of explanatory variables (three of which limit sample size due to item non-response on the survey) (Tables A15-A19)
- Probit regression results for baseline model (for comparison with logit results in main text Table 4) (Table A20).
- Predicted annual cost calculations for prairie strip CRP program Table A21, Figure A4)
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**Table A1**

Comparison of key variable means by state: US Agricultural Census 2017 for Oilseed and Grain Farms (NAICC category 1111), CMSP 2018 returned sample, and CMSP 2018 analysis sample.

Variable	Units	ILLINOIS			INDIANA			MICHIGAN			OHIO		
		Ag Census	CMSP Returned	CMSP Analysis	Ag Census	CMSP Returned	CMSP Analysis	Ag Census	CMSP Returned	CMSP Analysis	Ag Census	CMSP Returned	CMSP Analysis
Farm size	Acres	604	411	435	526	496	524	447	567	562	374	430	448
	<i>CMSP n</i>		218	163		160	106		118	77		208	141
Farms <500 ac	Percent	64%	70%	66%	71%	72%	66%	75%	67%	71%	79%	69%	65%
	<i>CMSP n</i>		218	163		160	106		118	77		208	141
Farms >=500 ac	Percent	36%	30%	34%	29%	28%	34%	25%	33%	29%	21%	31%	35%
	<i>CMSP n</i>		218	163		160	106		118	77		208	141
Farms w/land CRP,CREP,WRP	Percent	30%	24%	33%	22%	22%	29%	13%	9%	13%	22%	29%	33%
	<i>CMSP n</i>		299	163		217	106		209	77		255	141
Off-farm work (>1 day/year)	percent	52%	43%	44%	53%	34%	37%	48%	33%	38%	58%	42%	45%
	<i>CMSP n</i>		220	163		164	106		112	77		209	141
Age (mean)	Years	58	63	61	57	63	62	57	64	62	58	61	60
	<i>CMSP n</i>		219	163		164	106		112	77		209	141
Corn grain yield in 2017 (mean)	bushels/acre	198	205	204	182	183	186	160	168	171	174	178	182
	<i>CMSP n</i>		200	147		143	94		85	60		174	122
Soybean yield in 2017 (mean)	bushels/acre	57	60	60	53	54	55	43	46	46	49	52	53
	<i>CMSP n</i>		195	146		138	92		93	65		181	122

**Data sources:**

Illinois 2017 Census of Agriculture -State Data USDA, National Agricultural Statistics Service Table 75. Summary by North American Industry Classification System: 2017

Indiana 2017 Census of Agriculture -State Data USDA, National Agricultural Statistics Service Table 75. Summary by North American Industry Classification System: 2017

Michigan 2017 Census of Agriculture -State Data USDA, National Agricultural Statistics Service Table 75. Summary by North American Industry Classification System: 2017

Ohio 2017 Census of Agriculture -State Data USDA, National Agricultural Statistics Service Table 75. Summary by North American Industry Classification System: 2017

**Table A2**

Distribution of payment offer treatments (USD/Acre/Year) in sample, separated by state

Payment Offer (USD/Acre/Year)	Illinois	Indiana	Michigan	Ohio	Total # Obs.
64	0	0	25	0	25
80	0	0	0	20	20
84	0	22	0	0	22
87	8	6	0	8	22
90	30	0	0	0	30
127	0	0	21	0	21
161	0	0	0	32	32
167	0	22	0	0	22
175	6	5	0	8	19
180	33	0	0	0	33
254	0	0	18	0	18
322	0	0	0	31	31
334	0	16	0	0	16
350	13	3	0	7	23
360	33	0	0	0	33
381	0	0	13	0	13
483	0	0	0	30	30
501	0	28	0	0	28
525	11	4	0	5	20
540	29	0	0	0	29
<b>Total # Obs.</b>	<b>163</b>	<b>106</b>	<b>77</b>	<b>141</b>	<b>487</b>

**Table A3**

Rotated factor loadings from exploratory factor analysis for three latent environmental outcome variables

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<b>Perceived Environmental Effects of:</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
Soil erosion	0.09	0.95	-0.02
Nutrient runoff	0.08	0.95	-0.10
Weed populations	0.07	-0.20	0.80
Insect pest populations	0.09	-0.02	0.88
Populations of natural enemies of pests	0.57	0.05	0.41
Pollinator populations	0.90	0.11	0.08
Wildflower populations	0.88	0.08	0.06

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**Table A4**  
 Rotated factor loadings from exploratory factor analysis for two latent operational outcome variables

<b>Perceived Operational Outcomes of PS on:</b>	<b>Factor 1</b>	<b>Factor 2</b>
Crop yields per <u>cropped acre</u>	0.03	0.84
Crop yields for <u>this entire field</u>	-0.002	0.82
Weed control costs per cropped acre	0.70	-0.19
Pest control costs per cropped acre	0.69	-0.23
Tillage costs per cropped acre	0.76	0.01
Planting costs per cropped acre	0.84	0.18
Total costs for this entire field	0.88	0.08
Time spent working this field	0.74	-0.04
Harvest costs per cropped acre	0.82	0.18



**Table A5**

Ex-post probability weights for survey-weighted regression analyses.

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<b>Strata</b>	<b>Strata Pop. Size</b>	<b>Strata Response Sample Size</b>	<b>Probability Weight</b>
Illinois, Large-scale Farms	7492	246	30.5
Illinois, Small-scale Farms	14980	53	282.6
Indiana, Large-scale Farms	3578	176	20.3
Indiana, Small-scale Farms	7153	41	174.5
Michigan, Large-scale Farms	1039	178	5.8
Michigan, Small-scale Farms	3370	32	105.3
Ohio, Large-scale Farms	1584	199	8.0
Ohio, Small-scale Farms	6355	56	113.5

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**Table A6**

Sample mean and standard deviation comparisons of explanatory variables between farmers who accepted and rejected the bid: 0.5 x CRP (N = 119).

VARIABLES (Units)	Accept (n <sub>1</sub> = 15)	Reject (n <sub>2</sub> = 104)
Payment Offer (USD/Acre/Year)	82.5 (10.2)	81.0 (9.44)
Alpha (Acres)	2.98 (2.02)	5.54** (4.25)
Perceived Yield Gains (Latent)	0.15 (0.20)	-0.06*** (0.29)
Perceived Pest Management Costs (Latent)	-0.30 (0.43)	0.06*** (0.50)
Perceived Farm Management Costs (Latent)	-0.13 (0.35)	0.05 (0.47)
Perceived Soil Retention (Latent)	0.56 (0.62)	-0.04*** (0.60)
Perceived Weed and Pest Pressure (Latent)	-0.41 (0.75)	0.07*** (0.51)
Perceived Biodiversity Benefit (Latent)	-0.05 (0.47)	-0.01 (0.32)
Age (Years)	62.8 (12.97)	60.0 (13.06)
Education (Categorical)	3.0 (1.0)	2.75 (0.84)
Non-Farm Work (Categorical)	2.07 (1.62)	2.28 (1.74)
Previous Contact (0/1)	0.40 (0.51)	0.42 (0.50)
CRP or EQIP-CSP Participation (0/1)	0.47 (0.52)	0.43 (0.50)

Standard deviations in parentheses. Asterisks represent significance levels of a two-sided t-test testing for equality of sample means between accept and reject sub-samples:

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table A7**

Sample mean and standard deviation comparisons of explanatory variables between farmers who accepted and rejected the bid: 1.0 x CRP (N = 127).

VARIABLES (Units)	Accept (n <sub>1</sub> = 29)	Reject (n <sub>2</sub> = 98)
Payment Offer (USD/Acre/Year)	168.2 (13.90)	162.1 (18.64)
Alpha (Acres)	3.91 (3.17)	5.30* (3.93)
Perceived Yield Gains (Latent)	0.06 (0.33)	-0.04* (0.23)
Perceived Pest Management Costs (Latent)	-0.11 (0.59)	0.05 (0.49)
Perceived Farm Management Costs (Latent)	-0.11 (0.44)	0.05* (0.44)
Perceived Soil Retention (Latent)	0.39 (0.60)	-0.17*** (0.61)
Perceived Weed and Pest Pressure (Latent)	-0.14 (0.55)	0.09* (0.60)
Perceived Biodiversity Benefit (Latent)	-0.01 (0.32)	-0.05 (0.38)
Age (Years)	63.6 (12.5)	60.0 (10.5)
Education (Categorical)	2.83 (0.93)	2.74 (0.84)
Non-Farm Work (Categorical)	1.69 (1.47)	2.20 (1.64)
Previous Contact (0/1)	0.52 (0.51)	0.49 (0.50)
CRP or EQIP-CSP Participation (0/1)	0.38 (0.49)	0.29 (0.45)

Standard deviations in parentheses. Asterisks represent significance levels of a two-sided t-test testing for equality of sample means between accept and reject sub-samples:

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table A8**

Sample mean and standard deviation comparisons of explanatory variables between farmers who accepted and rejected the bid: 2.0 x CRP (N = 121).

VARIABLES (Units)	Accept (n <sub>1</sub> = 68)	Reject (n <sub>2</sub> = 53)
Payment Offer (USD/Acre/Year)	331.9 (32.1)	325.6 (37.9)
Alpha (Acres)	4.67 (3.28)	6.0* (5.1)
Perceived Yield Gains (Latent)	0.07 (0.23)	-0.04** (0.25)
Perceived Pest Management Costs (Latent)	-0.02 (0.41)	0.02 (0.56)
Perceived Farm Management Costs (Latent)	-0.02 (0.28)	0.07 (0.42)
Perceived Soil Retention (Latent)	0.08 (0.67)	-0.10 (0.52)
Perceived Weed and Pest Pressure (Latent)	-0.04 (0.49)	0.05 (0.65)
Perceived Biodiversity Benefit (Latent)	0.02 (0.35)	-0.04 (0.35)
Age (Years)	60.9 (12.9)	61.0 (11.5)
Education (Categorical)	2.87 (0.84)	2.89 (0.87)
Non-Farm Work (Categorical)	2.24 (1.56)	1.77* (1.17)
Previous Contact (0/1)	0.44 (0.50)	0.28* (0.45)
CRP or EQIP-CSP Participation (0/1)	0.46 (0.50)	0.34 (0.48)

Standard deviations in parentheses. Asterisks represent significance levels of a two-sided t-test testing for equality of sample means between accept and reject sub-samples:

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table A9**

Sample mean and standard deviation comparisons of explanatory variables between farmers who accepted and rejected the bid: 3.0 x CRP (N = 120).

VARIABLES (Units)	Accept (n <sub>1</sub> = 72)	Reject (n <sub>2</sub> = 48)
Payment Offer (USD/Acre/Year)	493.7 (50.0)	501.8 (38.8)
Alpha (Acres)	4.98 (2.83)	4.97 (4.08)
Perceived Yield Gains (Latent)	0.10 (0.27)	-0.08*** (0.23)
Perceived Pest Management Costs (Latent)	-0.08 (0.42)	0.06* (0.42)
Perceived Farm Management Costs (Latent)	-0.14 (0.39)	0.06*** (0.41)
Perceived Soil Retention (Latent)	0.15 (0.62)	-0.21*** (0.51)
Perceived Weed and Pest Pressure (Latent)	-0.10 (0.65)	0.03 (0.45)
Perceived Biodiversity Benefit (Latent)	0.14 (0.33)	-0.05*** (0.31)
Age (Years)	62.3 (10.6)	63.6 (13.0)
Education (Categorical)	2.72 (0.84)	3.02* (0.89)
Non-Farm Work (Categorical)	2.19 (1.52)	2.19 (1.73)
Previous Contact (0/1)	0.43 (0.50)	0.38 (0.49)
CRP or EQIP-CSP Participation (0/1)	0.36 (0.48)	0.25 (0.44)

Standard deviations in parentheses. Asterisks represent significance levels of a two-sided t-test testing for equality of sample means between accept and reject sub-samples:

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table A10**  
 Bid acceptance rates by state.

State	Accept	Reject	Acceptance Rate
Illinois	70	93	0.43
Indiana	38	68	0.36
Michigan	23	54	0.30
Ohio	53	88	0.38

**Table A11**  
 Bid acceptance rate for Illinois farmers, by bid level.

Bid Level	# of Acceptances	# of Rejections	Acceptance Rate
0.5 x CRP	7	31	0.18
1.0 x CRP	12	27	0.31
2.0 x CRP	27	19	0.59
3.0 x CRP	24	16	0.60

**Table A12**  
Bid acceptance rate for Indiana farmers, by bid level.

Bid Level	# of Acceptances	# of Rejections	Acceptance Rate
0.5 x CRP	2	26	0.07
1.0 x CRP	5	22	0.19
2.0 x CRP	13	6	0.68
3.0 x CRP	18	14	0.56

**Table A13**  
Bid acceptance rate for Michigan farmers, by bid level.

Bid Level	# of Acceptances	# of Rejections	Acceptance Rate
0.5 x CRP	3	22	0.12
1.0 x CRP	2	19	0.10
2.0 x CRP	8	10	0.44
3.0 x CRP	10	3	0.77

**Table A14**

Bid acceptance rate for Ohio farmers, by bid level.

Bid Level	# of Acceptances	# of Rejections	Acceptance Rate
0.5 x CRP	3	25	0.11
1.0 x CRP	10	30	0.25
2.0 x CRP	20	18	0.53
3.0 x CRP	20	15	0.57



**Table A15**

Likelihood ratio and Wald tests comparing unweighted and weighted logit and probit models with three variable sets (N = 487).

Model	Log (Pseudo-) Likelihood	Statistic	p-value	Akaike's Information Criterion	Bayesian Information Criterion
<u>PANEL A: Unweighted logits</u>		(Likelihood ratio)			
Acceptance on Bid Level Only	-283.45	78.85	< 0.01	570.90	579.27
Baseline, weighted logit (Thesis, Table 10)	-244.88	77.15	< 0.01	515.75	<b>570.20</b>
+ CRP/EQIP-CSP Dummy	-242.63	4.49	0.0341	<b>513.26</b>	571.90
<u>PANEL B: Unweighted probits</u>		(Likelihood ratio)			
Acceptance on Bid Level Only	-283.10	79.54	< 0.01	570.21	578.58
Baseline, weighted probit	-244.52	77.16	< 0.01	515.04	<b>569.49</b>
+ CRP/EQIP-CSP Dummy	-242.42	4.20	0.0405	<b>512.85</b>	571.48
<u>PANEL C: Weighted logits</u>		(Wald)			
Acceptance on Bid Level Only	-16454.4	39.91	< 0.01	32912.9	32921.3
Baseline, weighted probit	-13803.8	36.42	< 0.01	27633.5	27688.0
+ CRP/EQIP-CSP Dummy	-13633.1	2.14	0.1433	<b>27294.3</b>	<b>27352.9</b>
<u>PANEL D: Weighted probits</u>		(Wald)			
Acceptance on Bid Level Only	-16442.9	45.01	< 0.01	32889.8	32898.1
Baseline, weighted probit	-13754.5	43.11	< 0.01	27535.1	27589.5
+ CRP/EQIP-CSP Dummy	-13587.8	2.22	0.1361	<b>27203.7</b>	<b>27262.3</b>

**Table A16**

Likelihood ratio tests comparing various model specifications: unweighted logit and  
 probit models (N = 248).

Model	Log Likelihood	Likelihood-ratio	<i>p</i> -value	Akaike's Information Criterion	Bayesian Information Criterion
<u>PANEL A: Unweighted logits</u>					
Acceptance on Bid Level Only	-145.08	45.79	< 0.01	294.16	301.19
Baseline, unweighted logit	-125.05	40.06	< 0.01	<b>276.11</b>	<b>321.78</b>
+ CRP/EQIP-CSP Dummy	-124.76	0.60	0.4403	277.51	326.70
+ Yieldprop	-124.06	1.38	0.2393	278.13	330.83
+ total farmland, cropland rented in, labor supply, livestock and time horizon	-120.26	7.62	0.1787	280.51	350.78
<u>PANEL B: Unweighted probits</u>					
Acceptance on Bid Level Only	-144.99	45.97	< 0.01	293.98	301.01
Baseline, weighted probit	-124.79	40.40	< 0.01	<b>275.58</b>	<b>321.26</b>
+ CRP/EQIP-CSP Dummy	-124.49	0.60	0.4374	276.98	326.17
+ Yieldprop	-123.86	1.27	0.2606	277.71	330.41
+ total farmland, cropland rented in, labor supply, livestock and time horizon	-119.92	7.88	0.1731	279.83	350.10

**Table A17**

Wald tests comparing various model specifications: weighted logit and  
 probit models (N = 248).

Model	Log Pseudo-Likelihood	Wald Statistic	p-value	Akaike's Information Criterion	Bayesian Information Criterion
<b><u>PANEL A: Weighted logits</u></b>					
Acceptance on Bid Level Only	-8534.3	34.82	< 0.01	17072.6	17079.6
Baseline, weighted logit	-6117.7	45.79	< 0.01	12261.4	12307.1
+ CRP/EQIP-CSP Dummy	-6067.7	0.88	0.3482	12163.4	12212.5
+ Yieldprop	-6066.1	0.06	0.8104	12162.3	12215.0
+ total farmland, cropland rented in, labor supply, livestock and time horizon	-5822.6	6.99	0.2214	<b>11685.2</b>	<b>11755.5</b>
<b><u>PANEL B: Weighted probits</u></b>					
Acceptance on Bid Level Only	-8542.3	44.33	< 0.01	17088.7	17095.7
Baseline, weighted probit	-6159.2	56.05	< 0.01	12344.4	12390.1
+ CRP/EQIP-CSP Dummy	-6114.3	0.85	0.3570	12256.5	12305.7
+ Yieldprop	-6110.2	0.15	0.7028	12250.4	12303.1
+ total farmland, cropland rented in, labor supply, livestock and time horizon	-5885.2	7.96	0.1585	<b>11810.5</b>	<b>11880.8</b>

**Table A18**

Likelihood ratio tests comparing various model specifications: unweighted logit & probit models (N = 212).

Model	Log Likelihood	Likelihood-ratio	p-value	Akaike's Information Criterion	Bayesian Information Criterion
<u>PANEL A: Unweighted logits</u>					
Acceptance on Bid Level Only	-123.24	40.56	< 0.01	250.48	257.20
Baseline, unweighted logit	-101.70	43.08	< 0.01	<b>229.40</b>	<b>273.04</b>
+ CRP/EQIP-CSP Dummy	-101.38	0.63	0.4262	230.77	277.76
+ Yieldprop	-99.87	3.02	0.0822	229.75	280.10
+ labor supply, land tenure, livestock, and time horizon	-97.60	4.54	0.3382	233.21	296.98
<u>PANEL B: Unweighted probits</u>					
Acceptance on Bid Level Only	-123.18	40.69	< 0.01	250.36	257.07
Baseline, weighted probit	-101.29	43.78	< 0.01	<b>228.57</b>	<b>272.21</b>
+ CRP/EQIP-CSP Dummy	-101.00	0.58	0.4476	230.00	276.99
+ Yieldprop	-99.40	3.19	0.0740	228.80	279.15
+ labor supply, land tenure, livestock, and time horizon	-97.19	4.43	0.3511	232.37	296.15

**Table A19**

Wald tests comparing various model specifications: weighted logit and  
 probit models (N = 212).

Model	Log Pseudo-Likelihood	Wald Statistic	<i>p</i> -value	Akaike's Information Criterion	Bayesian Information Criterion
<u>PANEL A: Weighted logits</u>					
Acceptance on Bid Level Only	-7724.4	31.66	< 0.01	15452.8	15459.5
Baseline, weighted logit	-5542.3	42.90	< 0.01	11110.5	11154.2
+ CRP/EQIP-CSP Dummy	-5499.3	0.72	0.3949	11026.6	11073.6
+ Yieldprop	-5499.3	0.00	0.9757	11028.5	11078.9
+ labor supply, land tenure, livestock, and time horizon	-5242.7	7.12	0.1295	<b>10523.4</b>	<b>10587.1</b>
<u>PANEL B: Weighted probits</u>					
Acceptance on Bid Level Only	-7734.2	40.74	< 0.01	15472.3	15479.0
Baseline, weighted probit	-5551.0	52.54	< 0.01	11128.1	11171.7
+ CRP/EQIP-CSP Dummy	-5515.1	0.68	0.4111	11058.1	11105.1
+ Yieldprop	-5515.0	0.00	0.9865	11060.1	11110.5
+ labor supply, land tenure, livestock, and time horizon	-5296.3	8.04	0.0901	<b>10630.6</b>	<b>10694.4</b>

**Table A20**

Unweighted and survey-weighted logit and probit regression results, baseline model specification (N = 487).

VARIABLES (Units)	Unweighted Logit	Unweighted Probit	Weighted Logit	Weighted Probit
Payment Offer (USD/Acre/Year)	0.00611*** (0.000747)	0.00364*** (0.000428)	0.00735*** (0.00109)	0.00440*** (0.000600)
Prairie Strip Land (Acres)	-0.122*** (0.0395)	-0.0658*** (0.0217)	-0.146** (0.0600)	-0.0804** (0.0324)
Perceived Yield Gains (Latent)	2.307*** (0.516)	1.346*** (0.298)	1.534* (0.800)	0.910** (0.440)
Perceived Pest Management Costs (Latent)	0.540 (0.391)	0.321 (0.227)	0.406 (0.645)	0.253 (0.358)
Perceived Farm Management Costs (Latent)	-1.120*** (0.434)	-0.681*** (0.254)	-1.149 (0.762)	-0.689* (0.415)
Perceived Soil Retention (Latent)	0.799*** (0.209)	0.451*** (0.119)	1.038*** (0.329)	0.615*** (0.184)
Perceived Weed and Pest Pressure (Latent)	-0.0967 (0.271)	-0.0457 (0.161)	-0.0761 (0.363)	-0.0291 (0.219)
Perceived Biodiversity Benefit (Latent)	0.423 (0.373)	0.277 (0.220)	0.738 (0.597)	0.409 (0.334)
Age (Years)	-0.00122 (0.0100)	0.000722 (0.00584)	-0.00539 (0.0181)	-0.00260 (0.00993)
Education (Categorical)	0.00472 (0.140)	-0.00231 (0.0810)	-0.157 (0.238)	-0.0895 (0.129)
Non-Farm Work (Categorical)	-0.0150 (0.0760)	-0.00663 (0.0439)	0.0259 (0.127)	0.00901 (0.0703)
Previous Contact (0/1)	0.254 (0.234)	0.146 (0.136)	0.569† (0.356)	0.347* (0.201)

Standard errors in parentheses: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1, † p = 0.110.

**Table A20 (Cont.)**

Unweighted and survey-weighted logit, probit regression results, full model specification in manuscript + CRP or EQIP-CSP participation dummy (N = 487).

VARIABLES (Units)	(1) Unweighted Logit	(2) Unweighted Probit	(3) Weighted Logit	(4) Weighted Probit
CRP or EQIP or CSP Participation (Dummy)	0.511** (0.242)	0.290** (0.142)	0.613 (0.419)	0.350 (0.235)
Constant	-1.916** (0.843)	-1.244** (0.495)	-1.618 (1.409)	-1.033 (0.792)
Pseudo R-squared	0.249	0.249	0.311	0.313

Standard errors in parentheses: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1, † p = 0.110.

**Table A21**

Predicted annual cost of a prairie strip incentive program on corn and soybean land in Illinois, Indiana, Michigan, and Ohio. Estimated program costs rounded to the nearest \$100,000. Except for payment level, all covariates are held at sample means.

Total Acres in Prairie Strips (thousands of acres)	Lower Bound Program Costs (millions of USD/year)	Upper Bound Program Costs (millions of USD/year)
100	\$6.0	\$17.7
150	\$17.4	\$40.4
200	\$32.9	\$69.5
250	\$52.2	\$105.4
300	\$75.3	\$150.2
350	\$102.7	\$208.5
400	\$135.8	\$296.6



### Figure A1

Crop Management and Stewardship Practices 2018: Contingent valuation questions.

## SECTION F: PRAIRIE STRIPS

**Prairie strips** are zones or strips inside corn and soybean fields planted with diverse mix of tall, perennial prairie grasses and wildflowers. Recent research has shown that prairie strips can prevent soil erosion, keep nutrients in the field, and provide habitat for pollinators, natural enemies of pests, and birds. Prairie strips are configured within a field to maximize conservation benefits without disrupting equipment operation on the rest of the field. After a few seasons of maintenance, prairie strips are mostly self-sustaining and can provide conservation benefits until removed.

**F1. Prior to this survey, had you heard of prairie strips?**  No  Yes

**F2. Prior to this survey, have you seen prairie strips practiced in person?**  No  Yes

*Suppose that the federal government is considering a program that would pay farmers each year for a 10-year commitment to install and maintain prairie strips on the field described in Section B. The details and responsibilities of the program are described below.*

<b>PRAIRIE STRIP CONTRACT</b>	
<b>Length:</b>	10 years beginning after harvest in <u>2019</u> , ending after harvest in 2029
<b>Seed:</b>	Mix of perennial prairie grasses and wildflowers, provided by government
<b>Size:</b>	About 5% of the enrolled field
<b>Configuration:</b>	Designed by farmer with extension agent to maximize conservation benefits and accommodate field equipment
<b>Management responsibilities performed by farmer:</b>	
	<i>Autumn 2019:</i> Tillage and herbicide burndown, seed by broadcast or drill
	<i>Spring 2020 and Spring 2021:</i> Mow two or three times to control weeds
	<i>Remaining Years:</i> Mow and spot herbicide application as needed
<b>Payment to you:</b>	<u>\$XXX per set-aside acre per year</u> (\$X,XXX per set-aside acre over ten years)

**F3. If you were to install prairie strips that covered 5% of the field described in Section B, what do you think the effects would be on the environmental outcomes listed below?**

<b>In and next to my field:</b>	<b>Decrease over 10%</b>	<b>Decrease 5%-10%</b>	<b>Stay about the same</b>	<b>Increase 5%-10%</b>	<b>Increase over 10%</b>
Weed populations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insect pest populations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Populations of natural enemies of pests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pollinator populations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wildflower populations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrient runoff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Soil erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

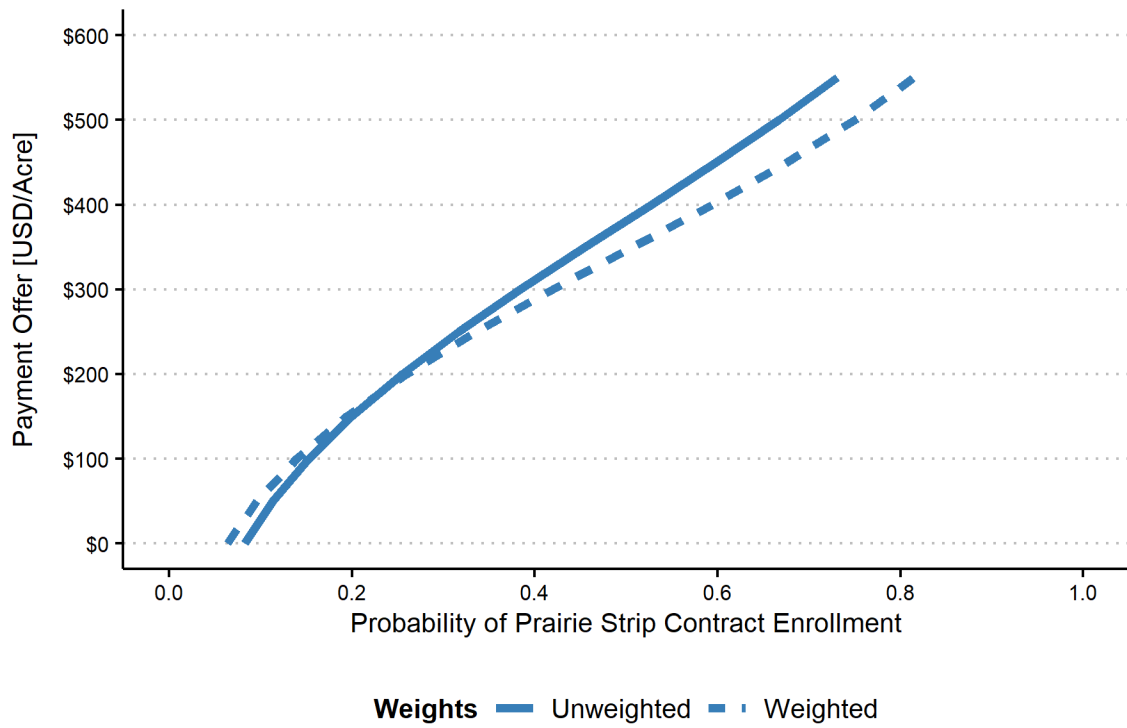
**F4. If you were to install prairie strips that covered 5% of the field described in Section B, what do you think the effects would be on the aspects of your operation listed below?**

	<b>Decrease over 10%</b>	<b>Decrease 5%-10%</b>	<b>Stay about the same</b>	<b>Increase 5%-10%</b>	<b>Increase over 10%</b>
Crop yields <u>per cropped acre</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tillage costs per cropped acre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weed control costs per cropped acre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pest control costs per cropped acre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Planting costs per cropped acre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Harvest costs per cropped acre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Crop yields for <u>this entire field</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Total costs for this entire field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Time spent working this field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**F5. Would you enroll your field in the prairie strip program at \$XXX per acre per year?  
 Your answer will help shape future government conservation programs and policy.**

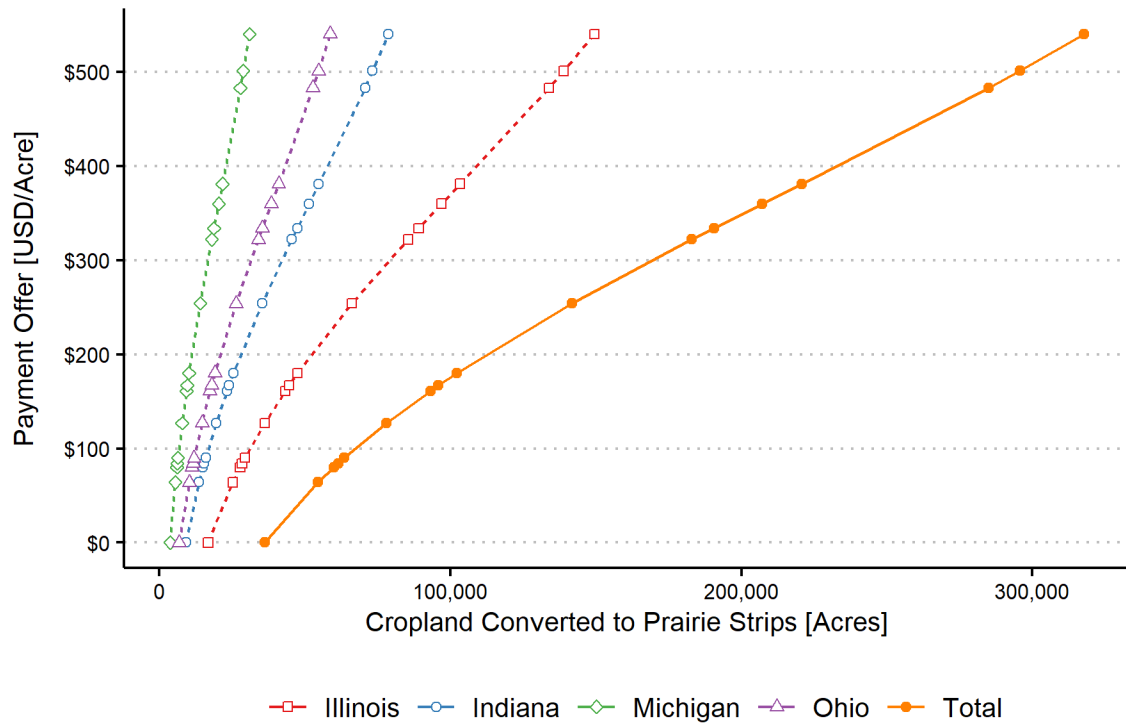
No     Yes

**Figure A2**  
Predicted probability of contract enrollment by payment offer, all four states;  
probit approach, unweighted and weighted estimates.



**Figure A3**

Corn and soybean acres supplied for prairie strips by payment offer, all four states;  
unweighted probit approach.



**Figure A4**

Projected annual costs to government of a prairie strip incentive program at uniform payments, by acreage supplied, all four states; unweighted probit approach.

