

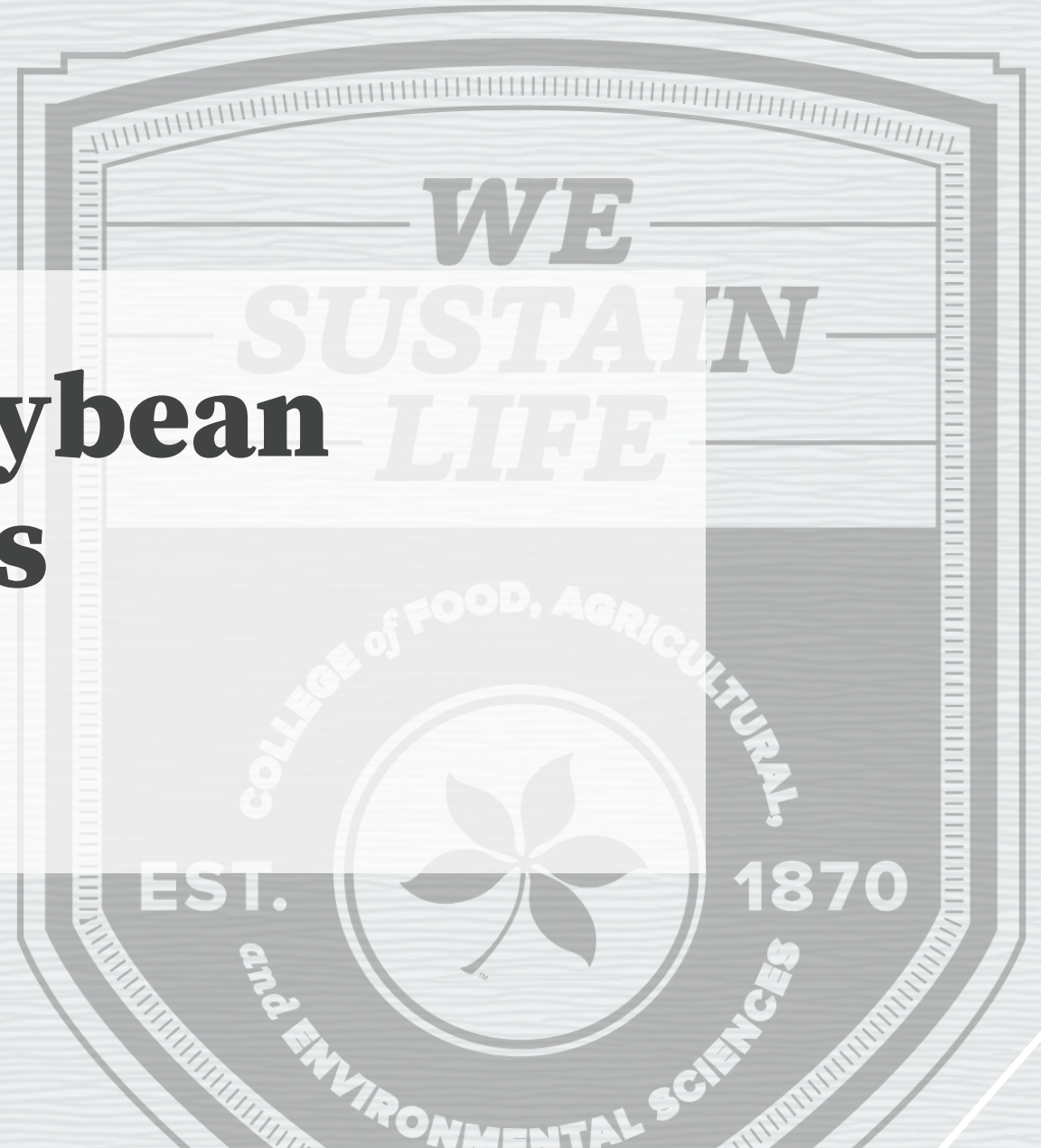
Organic Corn & Soybean Enterprise Budgets

Eric Richer

Field Specialist, Farm Management



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EXTENSION



Questions to answer this session

- What's located at www.farmoffice.osu.edu
- Organic price history
- Characteristics of this farmer group
- Draft Budgets
- Crop Insurance T-yields

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OSU's Farm Management Headquarters!

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Enterprise Budgets

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Enterprise Budgets

2022			
2021	2015	2009	2002
2020	2014	2008	Aquaculture Budgets
2019	2013	2007	Christmas Trees
2018	2012	2006	Misc. Budgets
2017	2011	2005	Specialty Crop Budgets
2016	2010	2003	Tree Fruit Budgets

2023

- Corn Production Budget 2023
- Soybean Production Budget 2023
- Wheat Production Budget 2023

2022

- Corn Production Budget 2022
- Soybean Production Budget 2022
- Wheat Production Budget 2022
- Organic Corn Production Budget 2022
- Alfalfa Hay Production Budget 2022
- Alfalfa Haylage Production Budget 2022

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More data needed:

- High speed disk
- Litter application
- Weed flaming
- Others?

Ohio Farm Custom Rates 2022

Operation	Max	Min	Responses	Average	Median	Stan Dev	Range	
Soil Preparation								
Stalk Chopper (\$/Acre):	\$18	\$6	9	\$12.60	\$12.00	\$3.72	\$16.32	\$8.88
Moldboard Plow (\$/Acre):	\$50	\$11	10	\$24.20	\$20.00	\$11.64	\$35.84	\$12.56
Chisel Plow (\$/Acre):	\$45	\$10	22	\$19.60	\$18.00	\$7.78	\$27.38	\$11.82
Disk Chisel (\$/Acre):	\$45	\$10	32	\$21.20	\$18.25	\$7.66	\$28.86	\$13.54
Disk Tandem (\$/Acre):	\$30	\$8	26	\$17.30	\$16.00	\$5.51	\$22.81	\$11.79
Disk Heavy or Offset (\$/Acre):	\$50	\$12	11	\$24.70	\$25.00	\$9.60	\$34.30	\$15.10
Soil Finishing (\$/Acre):	\$45	\$9	33	\$19.50	\$17.50	\$7.89	\$27.39	\$11.61
Field Cultivator (\$/Acre):	\$45	\$9	34	\$17.40	\$15.25	\$6.93	\$24.33	\$10.47
Land Leveling (\$/Acre):	\$32	\$9	10	\$17.20	\$16.10	\$6.96	\$24.16	\$10.24
Subsoiling: 8-15 Inches Deep (\$/Acre):	\$50	\$15	23	\$26.70	\$25.00	\$8.10	\$34.80	\$18.60
V-Ripping: Over 15 Inches Deep (\$/Acre):	\$43	\$20	6	\$28.50	\$25.50	\$8.06	\$36.56	\$20.44
Strip Tillage (\$/Acre):	\$40	\$12	8	\$28.60	\$30.00	\$9.14	\$37.74	\$19.46
Strip Tillage w/Fert. Injection (\$/Acre):	\$50	\$9	9	\$30.10	\$32.00	\$11.44	\$41.54	\$18.66
Fertilizer Application - Ground	Max	Min	Responses	Average	Median	Stan Dev	Range	
Dry Bulk (\$/Acre):	\$10	\$3.50	52	\$6.90	\$7.00	\$1.55	\$8.45	\$5.35
Liquid, Knife (\$/Acre):	\$25	\$4.50	23	\$13.00	\$13.00	\$4.44	\$17.44	\$8.56
Liquid, Spray (\$/Acre):	\$13	\$5	36	\$8.40	\$8.00	\$1.68	\$10.08	\$6.72
Anhydrous (\$/Acre):	\$24	\$6	25	\$15.50	\$16.00	\$3.47	\$18.97	\$12.03
Late Season Nitrogen Application with Coulters (\$/Acre)	\$18	\$12	7	\$14.60	\$15.00	\$1.83	\$16.43	\$12.77
Late Season Nitrogen Application with Drops (\$/Acre)	\$16	\$8	19	\$11.80	\$12.00	\$2.45	\$14.25	\$9.35
Lime Application (Material not included) (\$/Acre):	\$15	\$4	22	\$8.50	\$8.00	\$2.39	\$10.89	\$6.11
OR Lime Application (Material not included) (\$/Ton):	\$12.50	\$1.80	13	\$8.00	\$8.00	\$2.44	\$10.44	\$5.56
Variable Rate Fertilizer Application (\$/Acre)	\$14	\$5.25	30	\$7.80	\$7.75	\$1.87	\$9.67	\$5.93
Number of Products Applied	3	1	16	1.80	2.00	0.634	2.43	1.17
Chemical Control of Weeds/Insetcs/Disease	Max	Min	Responses	Average	Median	Stan Dev	Range	
Spraying - Self Propelled Sprayer (\$/Acre)	\$15	\$4.50	91	\$8.20	\$8.00	\$2.22	\$10.42	\$5.98
Spraying - Pull-Type Sprayer (\$/Acre)	\$12	\$4	23	\$7.40	\$7.50	\$1.79	\$9.19	\$5.61
Spraying Late Season (Fungicide) (\$/Acre)	\$18	\$5.50	42	\$9.80	\$9.00	\$2.92	\$12.72	\$6.88
Mechanical Weed Control	Max	Min	Responses	Average	Median	Stan Dev	Range	
Rotary Hoeing (\$/Acre)	\$18	\$5	9	\$9.50	\$8.00	\$3.54	\$13.04	\$5.96
Conventional Cultivating (\$/Acre)	\$21	\$10	7	\$13.40	\$12.00	\$3.54	\$16.94	\$9.86
Weed Electrocution (\$/Acre)	\$40	\$34	6	\$35.70	\$35.00	\$1.97	\$37.67	\$33.73

Organic Price History

Organic Corn Price Trend

Year	Projected Price	Harvest Price	AVERAGE
2011	\$ 10.75	\$ 11.30	\$ 11.03
2012	\$ 7.99	\$ 10.55	\$ 9.27
2013	\$ 8.79	\$ 6.83	\$ 7.81
2014	\$ 8.97	\$ 6.77	\$ 7.87
2015	\$ 7.81	\$ 7.21	\$ 7.51
2016	\$ 8.42	\$ 7.62	\$ 8.02
2017	\$ 9.06	\$ 7.99	\$ 8.53
2018	\$ 9.07	\$ 8.43	\$ 8.75
2019	\$ 9.22	\$ 8.99	\$ 9.11
2020	\$ 8.67	\$ 8.91	\$ 8.79
2021	\$ 9.56	\$ 11.21	\$ 10.39
2022	\$ 11.72	\$ 13.62	\$ 12.67

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Source: USDA-RMA

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Corn Price Ratio?

Average Price Ratio (2011-2022)

2:1

Year	ORGANIC Average	CONVENTIONAL Average	Price RATIO
2011	\$ 11.03	\$ 6.17	1.8
2012	\$ 9.27	\$ 6.59	1.4
2013	\$ 7.81	\$ 5.02	1.6
2014	\$ 7.87	\$ 4.06	1.9
2015	\$ 7.51	\$ 3.99	1.9
2016	\$ 8.02	\$ 3.68	2.2
2017	\$ 8.53	\$ 3.73	2.3
2018	\$ 8.75	\$ 3.82	2.3
2019	\$ 9.11	\$ 3.95	2.3
2020	\$ 8.79	\$ 3.94	2.2
2021	\$ 10.39	\$ 4.98	2.1
2022	\$ 12.67	\$ 6.38	2.0

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Source: USDA-RMA

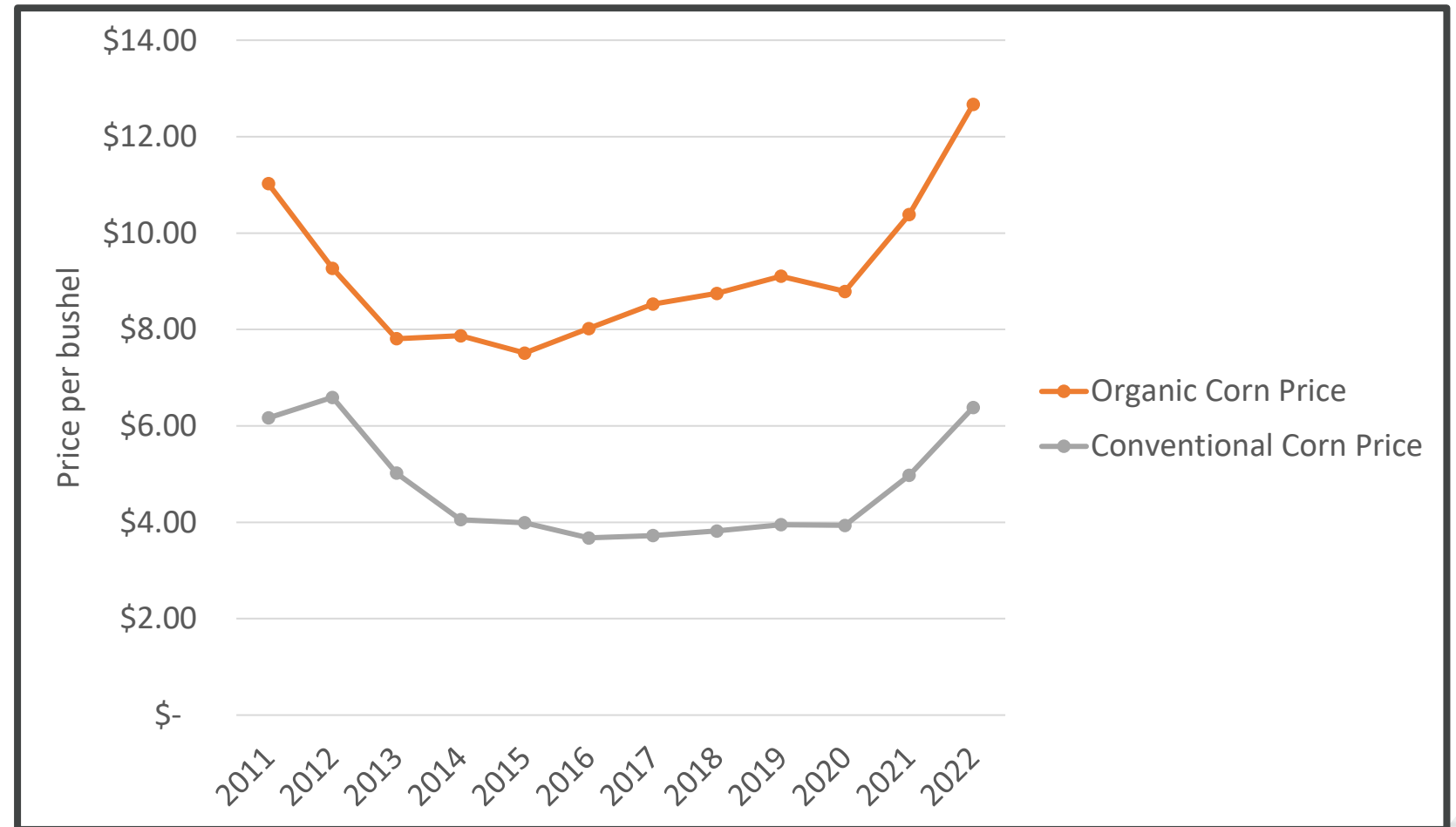
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Organic vs. Conventional Corn Price

2011-2022

Average Price Ratio

2:1



Organic Soybean Price Trend

Year	Projected Price	Harvest Price	AVERAGE	CFAES
2011	\$ 24.20	\$ 21.78	\$ 22.99	
2012	\$ 19.97	\$ 24.49	\$ 22.23	
2013	\$ 19.81	\$ 19.81	\$ 19.81	
2014	\$ 19.12	\$ 16.24	\$ 17.68	
2015	\$ 16.97	\$ 15.54	\$ 16.26	
2016	\$ 16.85	\$ 18.56	\$ 17.71	
2017	\$ 20.52	\$ 19.64	\$ 20.08	
2018	\$ 20.49	\$ 17.35	\$ 18.92	
2019	\$ 19.05	\$ 18.47	\$ 18.76	
2020	\$ 18.03	\$ 20.74	\$ 19.39	
2021	\$ 22.54	\$ 23.36	\$ 22.95	
2022	\$ 27.41	\$ 26.42	\$ 26.92	

Source: USDA-RMA

Soybean Price Ratio?

Average Price Ratio (2011-2022)

1.8:1

Year	ORGANIC Average	CONVENTIONAL Average	Price RATIO
2011	\$ 22.99	\$ 12.82	1.8
2012	\$ 22.23	\$ 13.97	1.6
2013	\$ 19.81	\$ 12.87	1.5
2014	\$ 17.68	\$ 10.51	1.7
2015	\$ 16.26	\$ 9.32	1.7
2016	\$ 17.71	\$ 9.30	1.9
2017	\$ 20.08	\$ 9.97	2.0
2018	\$ 18.92	\$ 9.38	2.0
2019	\$ 18.76	\$ 9.40	2.0
2020	\$ 19.39	\$ 9.86	2.0
2021	\$ 22.95	\$ 12.09	1.9
2022	\$ 26.92	\$ 14.07	1.9

CFAES

Source: USDA-RMA

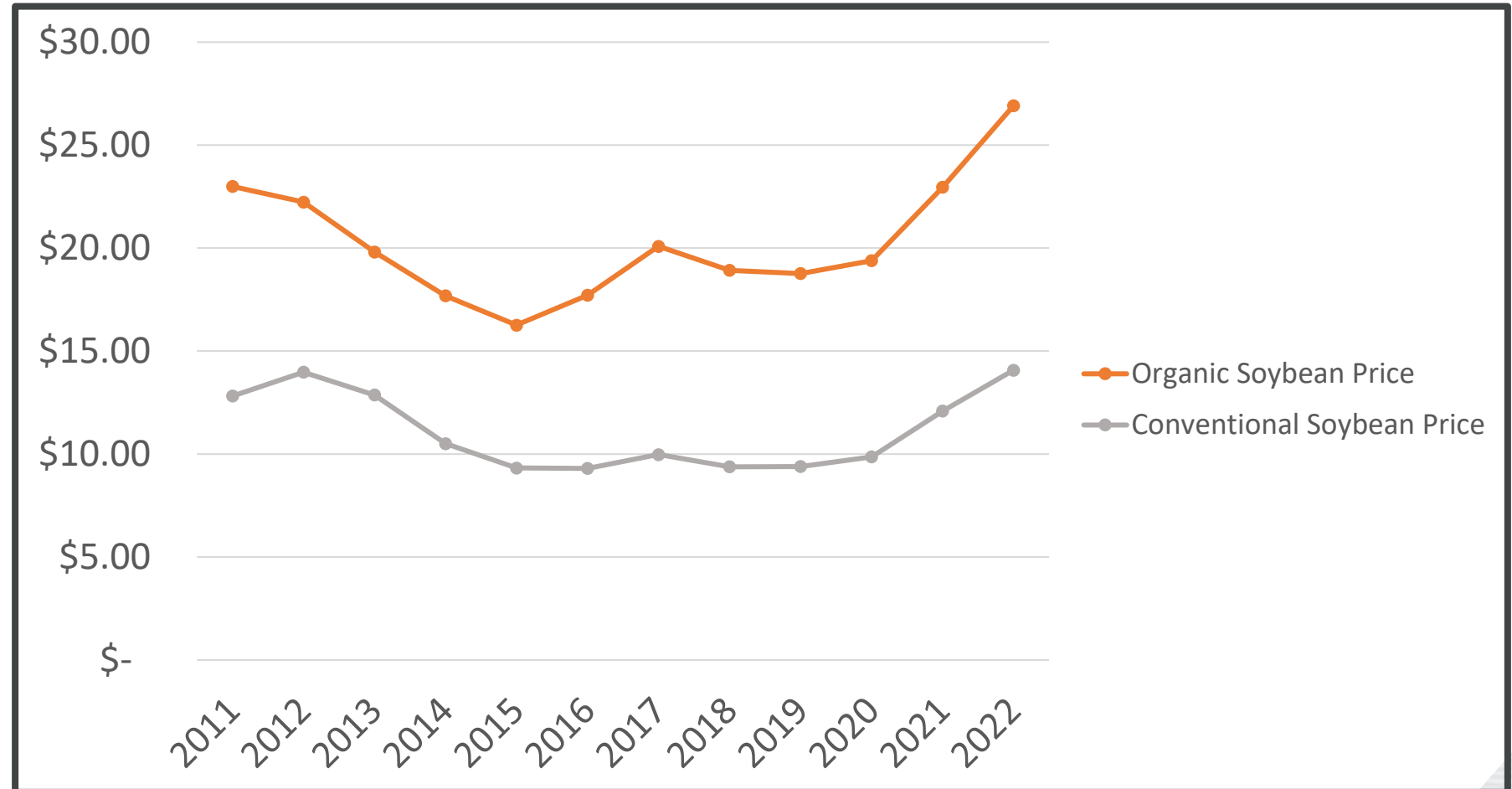
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Organic vs. Conventional Soybean Price

2011-2022

Average Price Ratio

1.8:1



Characteristics of this farmer group

2023 Ohio Organic Grains Conference registration survey

Characteristics of this farmer group:

Age and Farm Size

	Responses	AVERAGE	Range
Age	85	47	15 to 75
Farm Size, Organic Acres	64	572	8 to 3,700
Farm Size, Total Acres	76	730	8 to 5,500

Characteristics of this farmer group:

Average Yields and Ranges

	Responses	AVERAGE	Range
Corn, bu	53	137	80 to 180
Soybean (Feed), bu	40	44	20 to 65
Soybean (Food), bu	29	40	28 to 50
Wheat (SRW), bu	48	58	30 to 90
Sunflower, lbs	16	1,806	800 to 2,500

Characteristics of this farmer group:

Labor & Management, Nutrient Management

	Responses	Average	Range
Labor & Mgmt amount budgeted per acre	63	\$113	\$25 to \$250
Soil sampling frequency	85	Every 2-3 years	Never to annually in grids
Corn N Source	76	Poultry Litter	Legume CC, Chilean N, Liquid Manures, Compost, Pen Pack, Fish Meal

2023 Organic Corn Budget

Organic Corn Budget

See handout

THE OHIO STATE UNIVERSITY COLLEGE OF FOOD, AGRICULTURAL AND ENVIRONMENTAL SCIENCES		ORGANIC CORN PRODUCTION BUDGET - 2023 Conventional Tillage Practices; Nutrient Source-Poultry Litter Reflects 500 acres, Corn-Soybean-Wheat-Red Clover rotation				
		Updated:			1/5/2023	
ITEM	EXPLANATION	YOUR PROD. NUMBERS	PRICE PER UNIT	YIELD (bu/A) ¹		YOUR BUDGET
		109.6		137.0	164.4	160.0
RECEIPTS						
Corn ¹			\$11.67 /bu	1,279.03	1,598.79	1,867.20
ARC/PLC Payment (paid October 2023) ²				0.00	0.00	0.00
Crop Insurance Indemnity				0.00	0.00	0.00
Ad Hoc Payment				0.00	0.00	0.00
Grower or Market Premium				0.00	0.00	0.00
TOTAL RECEIPTS				1,279.03	1,598.79	1,867.20
VARIABLE COSTS						
Seed (kernels) ³	28000 32000 34000 34000		\$3.75 /1000	105.00	120.00	127.50
	Seed Cost Per Bag		\$300.00 /bag			
Nutrients⁴						
Starter Fertilizer				0.00	0.00	0.00
Poultry Litter	3.0 tons		75.00 /ton	225.00	225.00	225.00
Cover Crops/Green Manure			45.00 /acre	45.00	45.00	45.00
Other Nutrients	0.0 units		0.00 /unit	0.00	0.00	0.00
Lime/Gypsum (ton)	0.5 tons		35.00 /ton	17.50	17.50	17.50
Weed Control⁵				0.00	0.00	0.00
Drying ⁶	20.0 % moisture at harvest		0.047 /cent/bu/point	25.76	32.20	37.60
Hauling ⁷	\$0.49 /per bushel			53.70	67.13	78.40
Fuel, Oil, Grease ⁸				24.01	24.01	24.01
Repairs ⁹				33.18	33.18	33.18
Crop Insurance ¹⁰				42.00	45.00	55.00
Miscellaneous ¹¹				5.69	5.69	5.69
Hired Custom Work ¹²				15.00	15.00	15.00
Hired Labor ¹³				0.00	0.00	0.00
Int. on Oper. Cap. ¹⁴	7 mo.		8.00%	21.95	22.65	23.00
TOTAL VARIABLE COSTS	-Per Acre			613.79	652.35	686.88
	-Per Bushel			5.60	4.76	4.29
FIXED COSTS						
Labor Charge ¹⁵	5 hours		18.00 /hr	90.00	90.00	90.00
Management Charge ¹⁶	5% of gross revenue			63.95	79.94	93.36
Mach. And Equip. Charge ¹⁷				88.32	88.32	88.32
Land Charge ¹⁸	Rent			175.00	228.00	283.00
Miscellaneous ¹⁹				20.50	20.50	20.50
TOTAL FIXED COSTS				437.78	506.76	575.18
TOTAL COSTS	-Per Acre			1,051.56	1,159.12	1,262.06
	-Per Bushel			9.59	8.46	7.89
RETURN ABOVE VARIABLE COSTS²⁰						
RETURN ABOVE VARIABLE AND LAND COSTS				490.24	718.44	897.32
RETURN ABOVE TOTAL COSTS				227.47	439.67	605.14
RETURN TO LAND				402.47	667.67	888.14
RETURN TO LABOR AND MANAGEMENT				381.42	609.61	788.50
RETURN TO LAND, LABOR AND MANAGEMENT				556.42	837.61	1,071.50

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ORGANIC CORN PRODUCTION BUDGET- 2023

Conventional Tillage Practices; Nutrient Source-Poultry Litter

Reflects 500 acres, Corn-Soybean-Wheat-Red Clover rotation

CFAES

Updated:

1/5/2023

ITEM	EXPLANATION	YOUR PROD. NUMBERS	PRICE PER UNIT	YIELD (bu/A) ¹			YOUR BUDGET
				109.6	137.0	164.4	160.0
RECEIPTS							
Corn ¹			\$11.67 /bu	1,279.03	1,598.79	1,918.55	1,867.20
ARC/PLC Payment (paid October 2023) ²				0.00	0.00	0.00	0.00
Crop Insurance Indemnity				0.00	0.00	0.00	0.00
Ad Hoc Payment				0.00	0.00	0.00	0.00
Grower or Market Premium				0.00	0.00	0.00	0.00
TOTAL RECEIPTS				1,279.03	1,598.79	1,918.55	1,867.20
VARIABLE COSTS							
Seed (kernels) ³	28000 32000 34000	34000	\$3.75 /1000	105.00	120.00	127.50	127.50
	Seed Cost Per Bag		\$300.00 /bag				
Nutrients⁴							
Starter Fertilizer				0.00	0.00	0.00	0.00
Poultry Litter		3.0 tons	75.00 /ton	225.00	225.00	225.00	225.00
Cover Crops/Green Manure			45.00 /acre	45.00	45.00	45.00	45.00
Other Nutrients		0.0 units	0.00 /unit	0.00	0.00	0.00	0.00
Lime/Gypsum (ton)		0.5 tons	35.00 /ton	17.50	17.50	17.50	17.50
Weed Control⁵				0.00	0.00	0.00	0.00
Drying ⁶	20.0 % moisture at harvest		0.047 /cent/bu/point	25.76	32.20	38.63	37.60
Hauling ⁷	\$0.49 /per bushel			53.70	67.13	80.56	78.40
Fuel, Oil, Grease ⁸				24.01	24.01	24.01	24.01

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Repairs ⁹			33.18	33.18	33.18	33.18
Crop Insurance ¹⁰			42.00	45.00	55.00	55.00
Miscellaneous ¹¹			5.69	5.69	5.69	5.69
Hired Custom Work ¹²			15.00	15.00	15.00	15.00
Hired Labor ¹³			0.00	0.00	0.00	0.00
Int. on Oper. Cap. ¹⁴	7 mo.	8.00%	21.95	22.65	23.00	23.00
TOTAL VARIABLE COSTS	-Per Acre		613.79	652.35	690.07	686.88
	-Per Bushel		5.60	4.76	4.20	4.29
FIXED COSTS						
Labor Charge ¹⁵	5 hours	18.00 /hr	90.00	90.00	90.00	90.00
Management Charge ¹⁶	5%	of gross revenue	63.95	79.94	95.93	93.36
Mach. And Equip. Charge ¹⁷			88.32	88.32	88.32	88.32
Land Charge ¹⁸	Rent		175.00	228.00	283.00	283.00
Miscellaneous ¹⁹			20.50	20.50	20.50	20.50
TOTAL FIXED COSTS			437.78	506.76	577.75	575.18
TOTAL COSTS	-Per Acre		1,051.56	1,159.12	1,267.82	1,262.06
	-Per Bushel		9.59	8.46	7.71	7.89
RETURN ABOVE VARIABLE COSTS²⁰			665.24	946.44	1,228.48	1,180.32
RETURN ABOVE VARIABLE AND LAND COSTS			490.24	718.44	945.48	897.32
RETURN ABOVE TOTAL COSTS			227.47	439.67	650.73	605.14
RETURN TO LAND			402.47	667.67	933.73	888.14
RETURN TO LABOR AND MANAGEMENT			381.42	609.61	836.66	788.50
RETURN TO LAND, LABOR AND MANAGEMENT			556.42	837.61	1,119.66	1,071.50

ORGANIC vs. CONVENTIONAL CORN in 2023

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					Ohio Trend Yields	
					500 acre ORGANIC	2000 acre CONVENTIONAL
Receipts					137	184
Corn Price	\$11.67	VS	\$6.00		\$1,598.79	\$1,102.20
Variable Costs						
Seed Cost					\$120.00	\$115.60
Nutrients+Soil Amendment					\$287.50	\$269.70
Weed Control					\$0.00	\$51.03
Fuel					\$24.01	\$29.70
Repairs					\$33.18	\$33.75
Crop Insurance					\$45.00	\$30.00
All Other					\$142.67	\$179.75
Total Variable Costs / Acre					\$652.35	\$709.53
Fixed Costs						
Labor and Management					\$169.94	\$95.61
Machinery Cost					\$88.32	\$93.20
Land Rent					\$228.00	\$228.00
Total Costs / Acre					\$1,159.12	\$1,147.52
Returns						
Return Above Total Costs					\$439.67	-\$45.32
Return Above Variable Costs					\$946.44	\$392.67
Return to Land					\$667.67	\$182.68

ORGANIC CORN

CFAES

						Ohio Trend Yields		
						2023	2022	
Receipts						137	128	
Corn Price	\$11.67	VS	\$10.72			\$1,598.79	\$1,367.87	
Variable Costs								
Seed Cost						\$120.00	\$98.40	
Nutrients+Soil Amendment						\$287.50	\$202.50	
Weed Control						\$0.00	\$0.00	
Fuel						\$24.01	\$16.01	
Repairs						\$33.18	\$27.65	
Crop Insurance						\$45.00	\$40.00	
All Other						\$142.67	\$110.55	
		Total Variable Costs / Acre				\$652.35		\$495.11
Fixed Costs								
Labor and Management						\$169.94	\$153.39	
Machinery Cost						\$88.32	\$73.60	
Land Rent						\$228.00	\$207.00	
		Total Costs / Acre				\$1,159.12		\$949.60
Returns								
Return Above Total Costs						\$439.67	\$418.27	
Return Above Variable Costs						\$946.44	\$872.77	
Return to Land						\$667.67	\$625.27	

EXTENSION

2023 Organic Soybean Budget

Organic Soybean Budget

See handout

THE OHIO STATE UNIVERSITY COLLEGE OF FOOD, AGRICULTURAL AND ENVIRONMENTAL SCIENCES		ORGANIC SOYBEAN PRODUCTION BUDGET - 2023 Conventional Tillage Practices; Nutrient Source-Poultry Litter Reflects 500 acres, Corn-Soybean-Wheat-Red Clover rotation				Updated	1/5/2023
ITEM	EXPLANATION	YOUR PROD. NUMBERS	PRICE PER UNIT	YIELD (bu/A) ¹		YOUR BUDGET	
				34	43	52	52
RECEIPTS							
Soybeans ¹			\$26.92 bu	926.05	1,157.56	1,389.07	1,399.84
ARC/PLC Payment (paid October 2023) ²				0.00	0.00	0.00	0.00
Crop Insurance Indemnity				0.00	0.00	0.00	0.00
Ad Hoc Payment				0.00	0.00	0.00	0.00
Grower or Market Premium				0.00	0.00	0.00	0.00
TOTAL RECEIPTS				926.05	1,157.56	1,389.07	1,399.84
VARIABLE COSTS							
Seed ³	200000 seeds/ac	200000	0.536 /1000 seeds	107.20	107.20	107.20	107.20
Nutrients⁴							
Starter Fertilizer				0.00	0.00	0.00	0.00
Poultry Litter	0.0 tons		75.00 /ton	0.00	0.00	0.00	0.00
Cover Crops/Green Manure			62.00 /acre	62.00	62.00	62.00	62.00
Other Nutrients	0.0 units		0.00 /unit	0.00	0.00	0.00	0.00
Lime/Gypsum (ton)	0.0 tons		35.00 /ton	0.00	0.00	0.00	0.00
Weed Control⁵				0.00	0.00	0.00	0.00
Hauling ⁶	\$0.490 /per bushel			16.86	21.07	25.28	25.48
Fuel, Oil, Grease ⁷				27.47	27.47	27.47	27.47
Repairs ⁸				25.90	25.90	25.90	25.90
Crop Insurance ⁹				35.00	39.00	44.00	44.00
Miscellaneous ¹⁰				3.87	3.87	3.87	3.87
Hired Custom Work ¹¹				71.40	71.40	71.40	71.40
Hired Labor ¹²				0.00	0.00	0.00	0.00
Int. on Oper. Cap. ¹³	6 mo.		8.00%	11.91	11.91	11.91	11.91
TOTAL VARIABLE COSTS	-Per Acre			361.61	369.82	379.04	379.23
	-Per Bushel			10.51	8.60	7.35	7.29
FIXED COSTS							
Labor Charge ¹⁴	5 hours		18.00 /hr	90.00	90.00	90.00	90.00
Management Charge ¹⁵	5% of gross income			46.30	57.88	69.45	69.99
Mach. and Equip. Charge ¹⁶				83.72	83.72	83.72	83.72
Land Charge ¹⁷				175.00	228.00	283.00	283.00
Miscellaneous ¹⁸				14.06	14.06	14.06	14.06
TOTAL FIXED COSTS				409.08	473.66	540.23	540.77
TOTAL COSTS	-Per Acre			770.69	843.48	919.27	920.01
	-Per Bushel			22.40	19.62	17.82	17.69
RETURN ABOVE VARIABLE COSTS¹⁹				564.44	787.74	1,010.03	1,020.61
RETURN ABOVE VARIABLE AND LAND COSTS				389.44	559.74	727.03	737.61
RETURN ABOVE TOTAL COSTS				155.35	314.08	469.80	479.83
RETURN TO LAND				330.35	542.08	752.80	762.83
RETURN TO LABOR AND MANAGEMENT				291.66	461.95	629.25	639.82
RETURN TO LAND, LABOR, AND MANAGEMENT				466.66	689.95	922.25	922.82

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THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

ORGANIC SOYBEAN PRODUCTION BUDGET - 2023

Conventional Tillage Practices; Nutrient Source-Poultry Litter

Reflects 500 acres, Corn-Soybean-Wheat-Red Clover rotation

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Updated:

1/5/2023

ITEM	EXPLANATION	YOUR PROD. NUMBERS	PRICE PER UNIT	YIELD (bu/A) ¹		YOUR BUDGET
				34	43	52
RECEIPTS						
Soybeans ¹			\$26.92 bu	926.05	1,157.56	1,389.07
ARC/PLC Payment (paid October 2023) ²				0.00	0.00	0.00
Crop Insurance Indemnity				0.00	0.00	0.00
Ad Hoc Payment				0.00	0.00	0.00
Grower or Market Premium				0.00	0.00	0.00
TOTAL RECEIPTS				926.05	1,157.56	1,389.07
VARIABLE COSTS						
Seed ³	200000 seeds/ac	200000	0.536 /1000 seeds	107.20	107.20	107.20
Nutrients ⁴						
Starter Fertilizer				0.00	0.00	0.00
Poultry Litter	0.0 tons		75.00 /ton	0.00	0.00	0.00
Cover Crops/Green Manure			62.00 /acre	62.00	62.00	62.00
Other Nutrients	0.0 units		0.00 /unit	0.00	0.00	0.00
Lime/Gypsum (ton)	0.0 tons		35.00 /ton	0.00	0.00	0.00
Weed Control ⁵				0.00	0.00	0.00
Hauling ⁶	\$0.490 /per bushel			16.86	21.07	25.28
Fuel, Oil, Grease ⁷				27.47	27.47	27.47
Repairs ⁸				25.90	25.90	25.90

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Crop Insurance ⁹			35.00	39.00	44.00	44.00
Miscellaneous ¹⁰			3.87	3.87	3.87	3.87
Hired Custom Work ¹¹			71.40	71.40	71.40	71.40
Hired Labor ¹²			0.00	0.00	0.00	0.00
Int. on Oper. Cap. ¹³	6 mo.	8.00%	11.91	11.91	11.91	11.91
TOTAL VARIABLE COSTS	-Per Acre		361.61	369.82	379.04	379.23
	-Per Bushel		10.51	8.60	7.35	7.29
FIXED COSTS						
Labor Charge ¹⁴	5 hours	18.00 /hr	90.00	90.00	90.00	90.00
Management Charge ¹⁵	5%	of gross income	46.30	57.88	69.45	69.99
Mach. and Equip. Charge ¹⁶			83.72	83.72	83.72	83.72
Land Charge ¹⁷			175.00	228.00	283.00	283.00
Miscellaneous ¹⁸			14.06	14.06	14.06	14.06
TOTAL FIXED COSTS			409.08	473.66	540.23	540.77
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ORGANIC vs. CONVENTIONAL SOYBEAN in 2023

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		Yield in bushels/acre	
		500 acre ORGANIC	2000 acre CONVENTIONAL
Receipts		43	57
Soybean Price	\$26.92 vs. \$13.30	\$1,157.56	\$751.45
Variable Costs			
Seed Cost		\$107.20	\$69.60
Fertilizer+Soil Amendment		\$62.00	\$97.09
Weed Control/Crop Protection Products		\$0.00	\$78.07
Fuel		\$27.47	\$25.01
Repairs		\$25.90	\$28.78
Crop Insurance		\$39.00	\$24.00
All Other		\$108.25	\$47.73
Total Variable Costs / Acre		\$369.82	\$370.28
Fixed Costs			
Labor and Management		\$147.88	\$57.37
Machinery Cost		\$83.72	\$74.59
Land Rent		\$228.00	\$228.00
Total Costs / Acre		\$843.48	\$744.30
Returns			
Return to Total Costs		\$314.08	\$7.15
Return to Variable Costs		\$787.74	\$381.17
Return to Land		\$542.08	\$235.15

Risk Management with Crop Insurance

How can you protect your financial risk?

- Have lots of cash!
- Diversify your farm
- Get an off-farm job
- USDA Farm Bill – ARC/PLC
- Value-added grain marketing
- Be the least-cost (per bu.) producer



- Crop Insurance – Types

MPCI Revenue (RP) or Yield Protection (YP)

USDA-Non-insured Assistance Program (NAP)

Pasture, Range, and Forage (PRF)

Whole Farm Revenue Protection (WFRP)

Private products (Hail, ICE, etc.)

Contract Pricing with organics

Who uses Crop Insurance?

Characteristics of this farmer group

	Responses	USERS
Corn	56	74%
Soybean (Feed)	42	75%
Soybean (Food)	29	66%
Wheat (SRW)	51	63%

Crop Insurance Yields – 1 element

4 years of bad plug yields – ‘T-yields’

Fulton County, OH T-yields

	Conventional	Transitional	Organic
Corn	173	112	112
Soybean,Commodity	53	34	34
Soybean, Food	49	32	32
Wheat, Winter	81	53	53

Source: USDA-RMA

Crop Insurance Yields

Organic Corn Yield Example – 4 years of ‘building’ yield history

	2023	2024	2025	2026	2027
Yield Point	112	137	137	137	137
Yield Point	112	112	125	125	125
Yield Point	112	112	112	180	180
Yield Point	112	112	112	112	158
Actual Prod. History (APH) (Yield used for coverage)	112	118	122	139	150
Current Crop Year's harvested yield	137	125	180	158	TBD

This concept applies to building your transitional yield history too.

Thoughts for Crop Insurance

- Trusted agent -- understands organic crop insurance
- Study – be your own best insurance agent
- Carrying a high level of coverage in first 2-3 years (while building yield history) seems expensive for the coverage BUT risky
- May consider separating organic vs. conventional entities OR
- Do not plant the same grain--organic and conventional--in the same square mile (unit)
- Farm Service Agency Reporting: Organic = OC, Transitional = OT, Conventional = C

Farmer Financing Options with USDA-FSA

Loans for Beginning Farmers and Ranchers (2008)

- Definition of Beginning Farmer/Rancher
 - a. < 10 years farming
 - b. Substantial participation
 - c. Own <30% of avg farm size in county
- Loan Options ~4.5% APR
 - a. Direct Farm Ownership: \$600,000
 - b. Direct Operating Loan: \$400,000
 - c. Micro Loans: \$50,000
 - c. Youth Loans: \$5,000
- Down Payment Farm Ownership Loan
 - a. 50%, 45%, 5% 'Rule'
 - b. **1.5%** APR up to \$300,000 (45% of \$667,000)
 - c. 20-year term

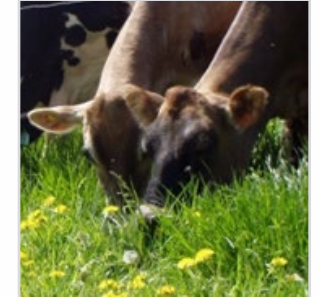
Loans for Socially Disadvantaged (SDA) Farmers and Ranchers (2014)

- Definition of SDA Farmer/Rancher
 - a. Racial, ethnic, gender prejudice groups
 - b. Substantial participation
- Same parameters as Beginning Farmer Loans
 - a. 50%, 45%, 5% 'Rule'
 - b. **1.5%** APR up to \$300,000 (45% of \$667,000)
 - c. 20-year term

Source: United States Department of Agriculture, Farm Service Agency
Presenter: Eric Richer, ANR Educator, OSU Extension richer.5@osu.edu

Ohio Farm Business Analysis and Benchmarking Program

Helping Ohio's farm families achieve financial success



- Clint Schroeder, Leader, Farm Business Analysis Team

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Whole Farm Analysis

Enterprise Analysis

Personalized Benchmark
Reports

Farm Financial Standards

Costs of Production
per acre, bushel, ton,
head, and/or cwt.

Annual Summaries

<https://farmprofitability.osu.edu>

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Summary

- Use information at www.farmoffice.osu.edu
- Corn price has rebounded to 2011 levels
- Soy price was high, now softened a bit (India)
- Give comments to Eric on budget richer.5@osu.edu
- Carefully consider how you will manage \$ risk

Thank You!

Please complete the pink conference evaluation!