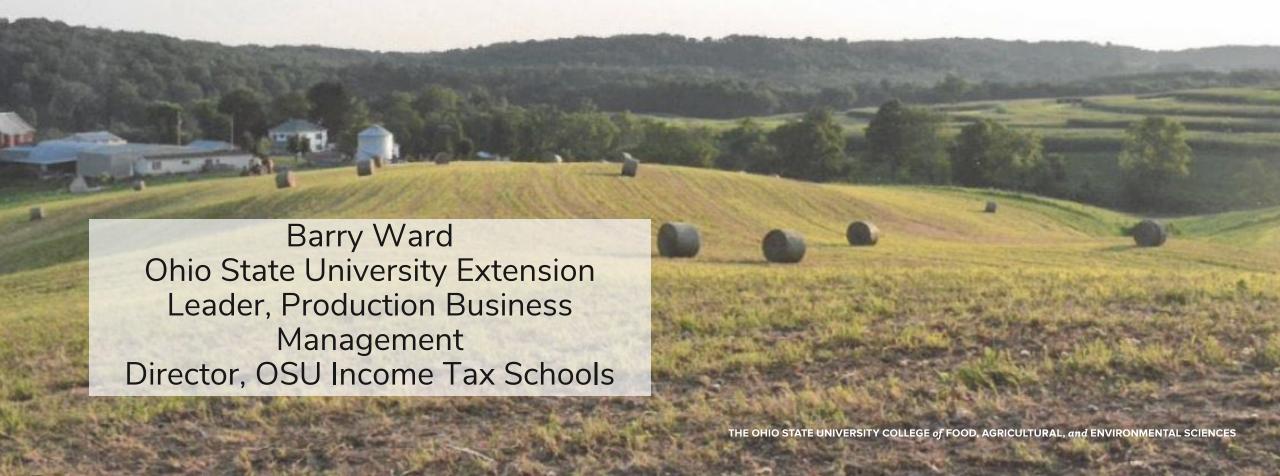
THE OHIO STATE UNIVERSITY EXTENSION

Economic View from the Farm Gate

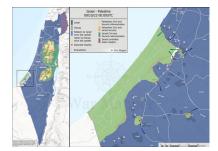
Allen County Ag Outlook February 6





Discussion Points





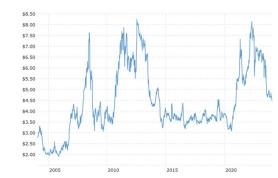


- ✓ Macroeconomic Issues
- ✓ Overview of select input costs
- ✓ Economic outlook Ohio row crops '24 crop budgets

✓ Ohio Cropland Values and Cash Rents

✓ Land Value/Rental Market Outlook

✓ Tax Update







Inflation – Consumer Price Index (CPI)



U.S. Bureau of Labor Statistics



Federal Funds Effective Rate

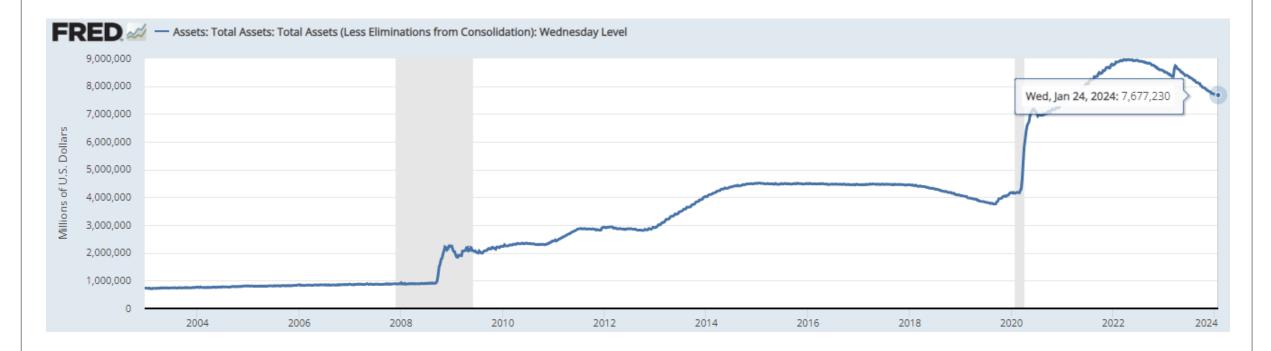
Source: Federal Reserve Bank of St. Louis

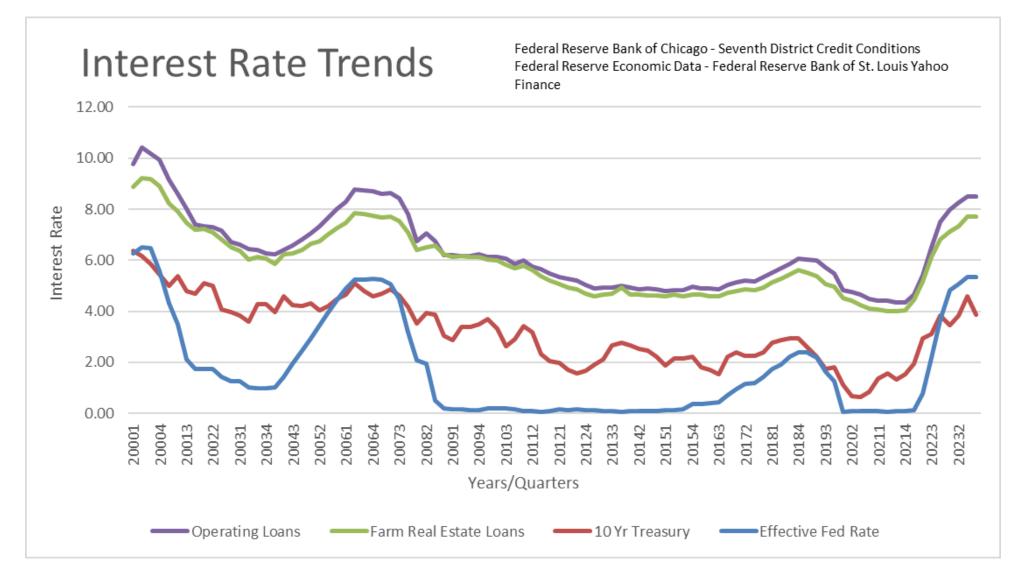




Fed - Unwinding/Shrinking Balance Sheet

Source: Board of Governors FOMC





Fed Decision-Making

Inflation

- Regional Bank Concerns
- Recession Concerns



- Geo-political risk
- Weak bond market
- Political turmoil

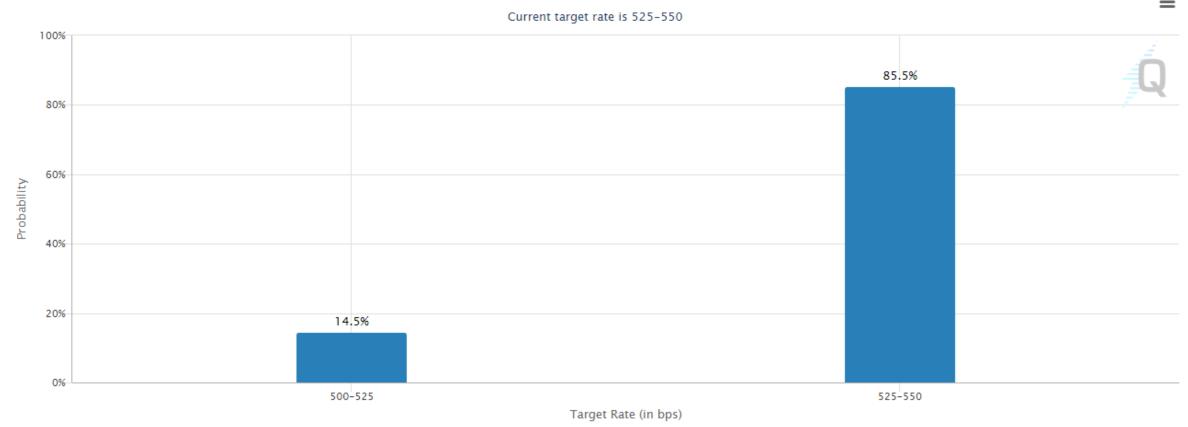




CME FedWatch Tool

Source: CME Group

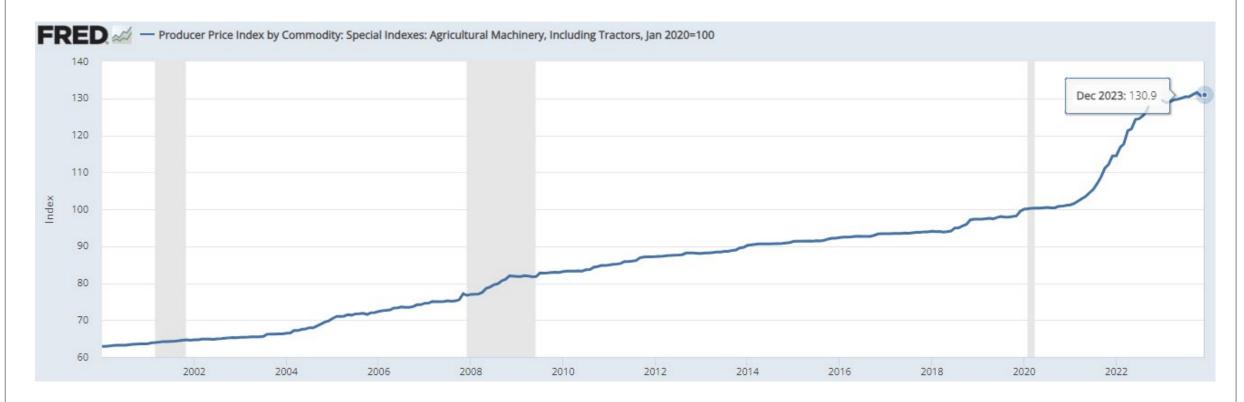






Producer Price Index by Commodity: Machinery and Equipment Agricultural Machinery and Equipment, Including Tractors

Source: Federal Reserve Economic Data (FRED) St. Louis Fed Index Jan 2020 = 100





Input Costs and Budgets

Ohio Crop Enterprise Budgets 2024 Input Costs

✓ Seed Cost: +2.5%

✓ Diesel Price: \$3.50 / gallon

✓ Crop Protection

Chemical Cost: Flat to Modestly higher

✓ Fertilizer Prices:

✓ NH3 \$775/T

✓ 28% \$325/T

✓ MAP \$790/T

✓ Potash \$475/T



✓ Machinery & Equipment / Repairs: Flat to Modestly Higher

✓ Interest Rates / Carrying Charges: Continued high

✓ Rents: Modestly higher



Energy Information Administration Short-Term Energy Outlook

EIA Dec 2023	2022	2023	2024	'23-'24	'22-'24
WTI Crude (\$/brl)	94.91	77.58	77.99	0.5%	-17.8%
Brent Crude (\$/brl)	100.94	82.41	82.49	0.1%	-18.3%
Gasoline (\$/gal)	3.97	3.52	3.36	-4.5%	-15.4%
Diesel (\$/gal)	5.01	4.21	3.91	-7.1%	-22.0%
Natural Gas (\$s/MMBtu)	6.42	2.54	2.66	4.7%	-58.6%

Source: EIA

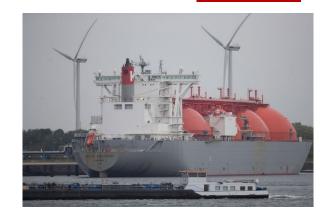


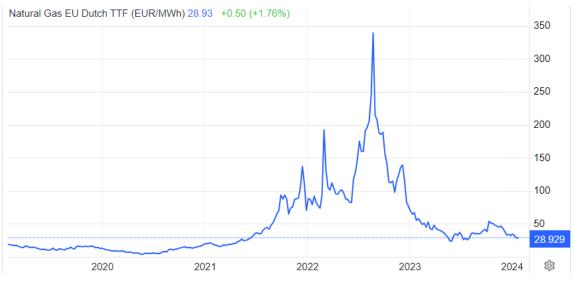
Natural Gas Price – U.S. and Europe

✓ U.S. Natural Gas: \$2.66 MMBtu

✓ E.U. Dutch TTF: \$8.90 MMBtu





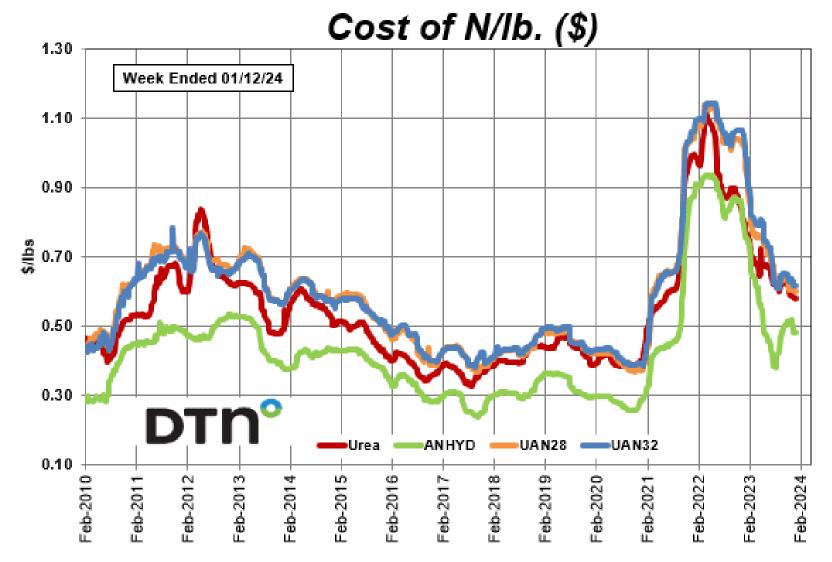


Source: Trading Economics

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Cost of Nitrogen Per Pound

Source: DTN



OSU Extension Fertilizer Price Survey 1/1/24



Table 1. First Quarter 2024 Ohio Fertilizer Prices

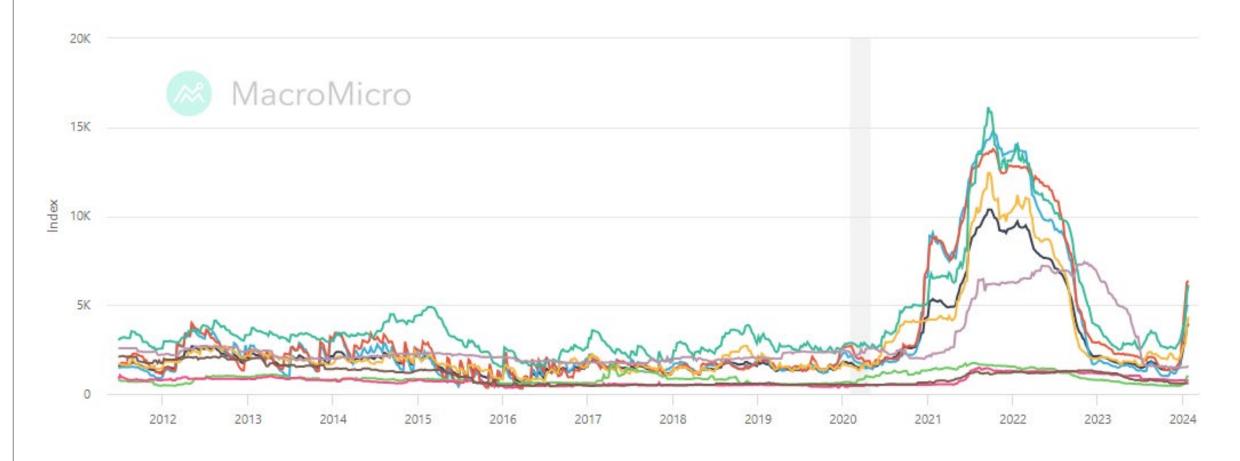
Product	Respon ses (n)	Sale Type	Min \$/ton	Max \$/ton	Average \$/ton
Anhydrous ammonia 82-0-0	8	FOB Plant	\$700	\$900	\$786
UAN 28-0-0	20	Direct to Farm	\$280	\$510	\$327
Urea 46-0-0	17	FOB Plant	\$458	\$530	\$502
MAP 11-52-0	16	FOB Plant	\$710	\$1136	\$797
DAP 18-46-0	13	FOB Plant	\$699	\$785	\$735
APP 10-34-0	15	Direct to Farm	\$495	\$605	\$569
Potash 0-0-60	20	FOB Plant	\$445	\$510	\$490
Ammonium Sulfate 21-0-0-24	14	FOB Plant	\$395	\$606	\$449
Ammonium Thio-Sulfate 12-0-0-26	14	FOB Plant	\$325	\$448	\$385

Fertilizer Supply/Demand Fundamentals

- ✓ Trade:
 - ✓ Russian invasion and ongoing war against Ukraine
 - ✓ U.N. Black Sea Grain Initiative (U.N./Turkey brokered deal)
 - ✓ Allows Ukrainian & Russian grain and fertilizer to be shipped through Black Sea region
 - ✓ Russia withdrew in July
 - ✓ China disciplined in volume of exports (strong domestic market)
 - ✓ Sanctions on Belarus Potash E.U. & U.S.
 - ✓ Russian export quotas on N and complex fertilizers
 - ✓ U.S. Dollar strength
 - ✓ DOC cuts countervailing duties on Moroccan P



World - Drewry World Container Index [WCI]



MacroMicro



Fertilizer Supply/Demand Fundamentals

✓ Slowing global economies

- ✓ Lower grain prices
- ✓ Abundant natural gas inventories and low prices



Crop Enterprise Budgets 2024										
			Corn	Soybeans	Wheat					
Receipts		bu/A Price	182@\$4.60	57@\$11.40	75@\$6.00					
Crop Revenu	е		\$836.28	\$644.10	\$452.40					
ARC/PLC + A	d Hoc		\$0.00	\$0.00	\$0.00					
Variable Cos	ts		\$558.44	\$295.15	\$255.05					
Returns										
Return Abo	ve Va	riable Costs	\$277.84	\$348.95	\$197.35					
Return Abo	ve Tot	tal Costs	-\$150.93	-\$21.33	-\$136.67					
Return to L	and		\$82.07	\$211.67	\$91.33					

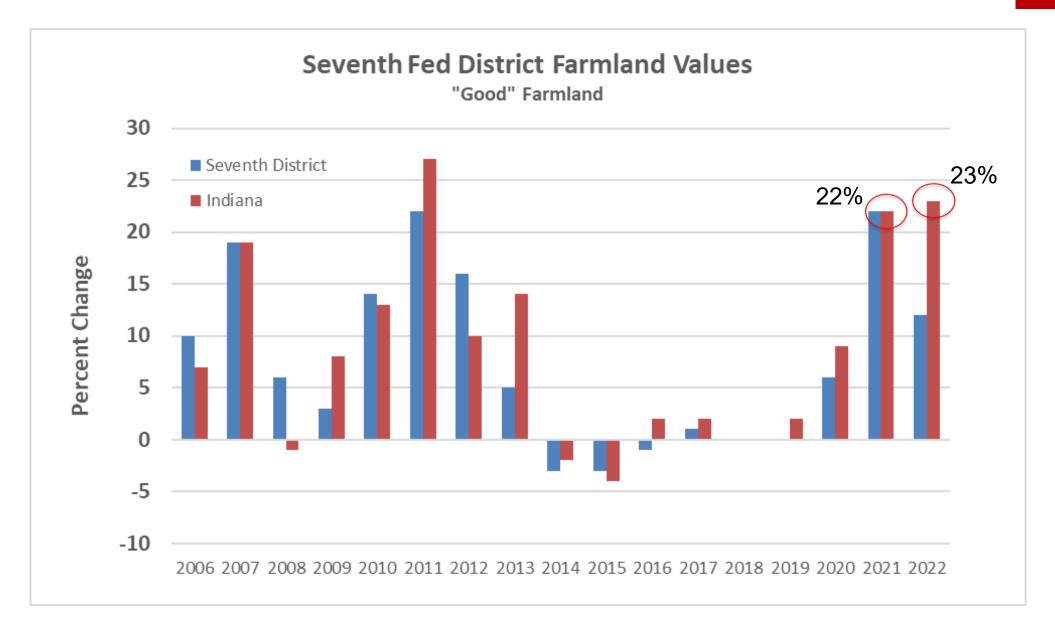


Crop Enterprise Budgets 2024										
			Corn	Soybeans	Wheat					
Receipts		bu/A Price	218@\$4.60	68@\$11.40	90@\$6.00					
Crop Revenue	Э		\$1,003.54	\$772.92	\$542.88					
ARC/PLC + A	d Hoc		\$0.00	\$0.00	\$0.00					
Variable Cos	ts		\$609.44	\$313.93	\$281.05					
Returns										
Return Abo	ve Va	riable Costs	\$394.10	\$458.99	\$261.83					
Return Abo	ve To	tal Costs	-\$98.03	\$27.26	-\$131.71					
Return to La	and		\$189.97	\$315.26	\$151.29					



Cropland Values and Cash Rents





Western Ohio Cropland Values 2022-23

✓ According to the Western Ohio Cropland Values and Cash Rents Survey, cropland <u>values</u> in western Ohio are expected to increase <u>in 2023 by 6.1 to 10.7 percent</u> depending on the region and land class. This is on top of increases from <u>2021 to 2022 of 6.9 to 13.8 percent</u> depending on region and productivity class.



Farmland Values/Rental Rates: Outlook

Supportive Fundamentals:

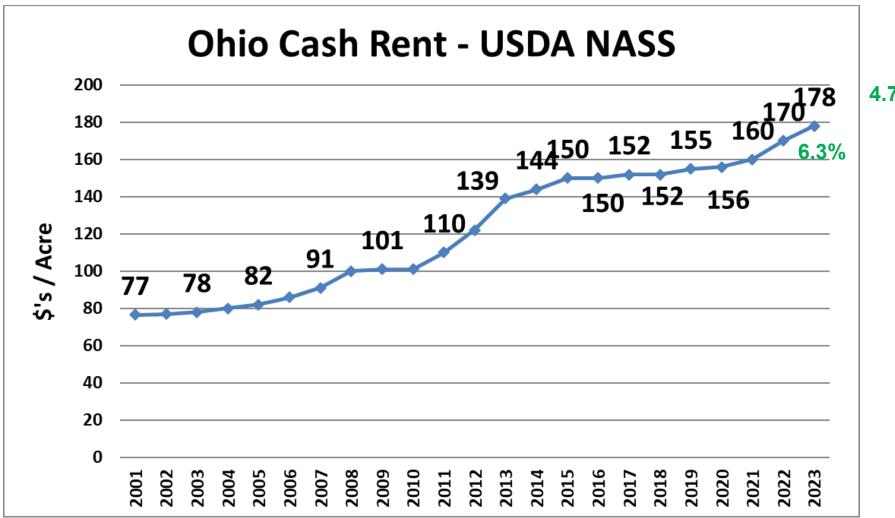
- ✓ Price/margin outlook relatively positive for 2024
- ✓ Farmer equity positions remain healthy
 - **✓** Positive income in '21, '22, '23
 - Ad-hoc governments payments MFP and CFAP, PPP Forgivable Loans
- ✓ CAUV Values Higher
- ✓ Development and §1031 LKE Purchases
- **✓** Energy Development

Non-Supportive Fundamentals:

- ✓ Declining crop prices and moderately high input costs will impact 2024 margins
- ✓ Lower/No ARC/PLC payments likely
- ✓ Interest rates trending higher



USDA NASS Land Values Survey 2023 Summary



4.7%



Western Ohio Cash Rents 2022-23

✓ Cash rents are expected to <u>increase from 5.0 to 6.7 percent in 2023</u> depending on the region and land class. This is on top of rental <u>increases of 1.3 to 3.8 percent from 2021 to 2022.</u>

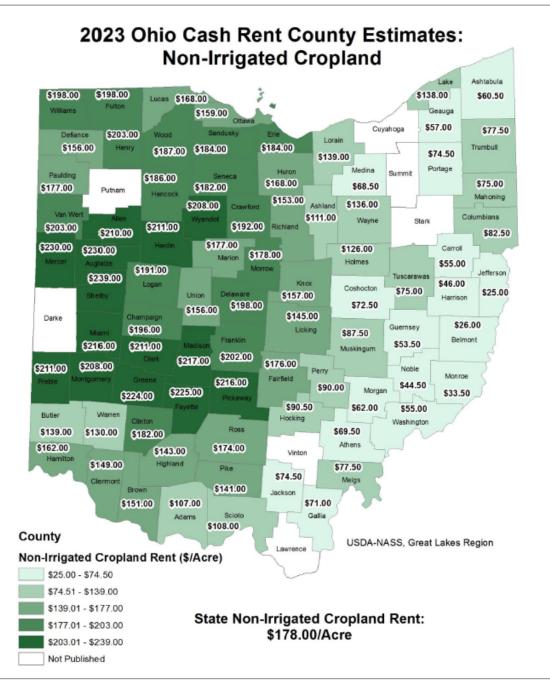


Western Ohio Cropland Values and Cash Rents 2022-23

Survey Report



Table 2:	Ohio Cropland Value					
Northwe	st Ohio Results					
Land Cla	ISS		Average	Std	Ran	ge*
Average		Avg Corn Yield (b/a)	180.1	15.2	195.2	164.9
		Avg Soybean Yield (b/a)	55.9	7.2	63.1	48.8
	Market Value per Acre	2022	\$8,781	\$1,624	\$10,405	\$7,156
		2023	\$9,529	\$1,770	\$11,299	\$7,759
	Rent per Acre	2022	\$205	\$41	\$246	\$164
		2023	\$218	\$41	\$259	\$177
Тор		Avg Corn Yield (b/a)	216.4	23.1	239.5	193.3
		Avg Soybean Yield (b/a)	67.9	7.5	75.4	60.5
	Market Value per Acre	2022	\$10,943	\$2,200	\$13,144	\$8,743
		2023	\$12,112	\$2,659	\$14,771	\$9,453
	Rent per Acre	2022	\$256	\$63	\$320	\$193
		2023	\$270	\$62	\$332	\$208
Bottom		Avg Corn Yield (b/a)	147.9	16.4	164.3	131.5
		Avg Soybean Yield (b/a)	42.5	7.4	49.9	35.1
	Market Value per Acre	2022	\$6,687	\$1,631	\$8,318	\$5,055
		2023	\$7,286	\$1,772	\$9,058	\$5,514
	Rent per Acre	2022	\$153	\$30	\$183	\$124
		2023	\$164	\$33	\$196	\$131





Tax Update

Beneficial Ownership Information Reporting

- ✓ Beginning on Jan. 1, 2024, many corporations, limited liability companies and other entities created or registered to do business in the United States must report information about their beneficial owners—the persons who ultimately own or control the company to the U.S. Department of the Treasury's Financial Crimes Enforcement Network (FinCEN).
- √ https://www.fincen.gov/boi

Financial Crimes Enforcement Network

- ✓ Each entity is responsible
- ✓ Do-it-yourself
- ✓ Seek assistance in filing: attorneys, tax professionals, others
- Financial Crimes Enforcement Network Beneficial Ownership Information
- ✓ https://www.fincen.gov/boi
- FinCEN BOI Frequently Asked Questions (FAQs)
- ✓ https://www.fincen.gov/boi-faqs



What Is To Be Reported?

- 1. Name, date of birth, and address of each beneficial owner(s).
- 2. A unique identification number from a driver's license, valid US passport, foreign passport or other government identification.
- 3. The issuing jurisdiction of the acceptable identification document.

Penalties for Failure to File Report

- ➤ Both civil and criminal.
- ≥\$500 per day.
- Criminal fines up to \$10,000 and/or imprisonment.

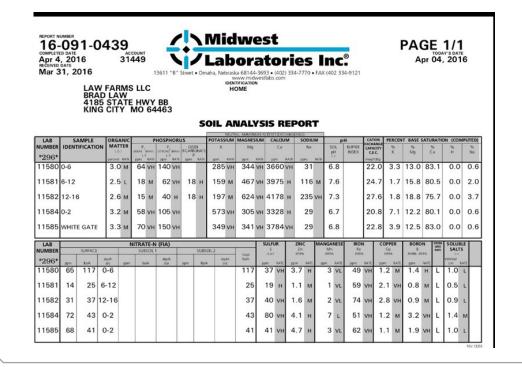
4. The image of the document.

Allocating Tax Basis on Purchased or Inherited Farmland to Fertilizer/Nutrients

- ✓ Allocate tax basis to "Excess Fertilizer Supply" or "Residual Fertility"
- ✓ If taxpayers can show that <u>fertilizer or nutrients</u> are a <u>separate asset</u> that can be distinguished from the soil, they may be able to allocate part of the purchase price/inherited value (tax basis) of farmland to fertilizer or nutrients that are in the soil at the time of purchase/inheritance.
- ✓ That allocation allows them to deduct the cost/value of the fertilizer/nutrients instead of including that portion of the purchase price or date-of-death basis in the non-depreciable basis of the land.

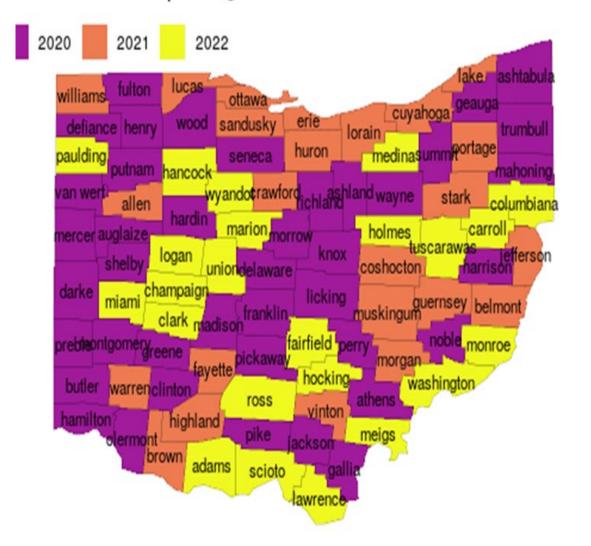
Cautions

- ✓ Might be considered an "aggressive tax position"
- ✓ Large basis allocations to excess (residual) fertility may raise flags
- Strongly recommend hiring a certified agronomist or certified crop advisor to conduct soil sampling to complete a report to include soil test levels, base levels, excess available nutrients, exhaustion period, etc.



NCDA&0	CS Agron	omic Di	vision	Pho	one: (919)	733-26	555	Website	: www	.ncagr.	gov/agron	omi/					Rep	ort No	. FY18-S	L000000
		Predi	ctive II R	epo	rt	Me	ehlich-3	Extraction	Clie	ent:					Advisor	:				
Farm:	S S S S S S S S S S S S S S S S S S S		to Helpfu	•		F	Sampled: Received: mpleted:	09/08/20	17		ampled Co					Adviso	or ID:			
Sample	ID: R1		Reco	mmend	ations:		Lime					Nutri	ents (lb/ac	re)					Mor	·e
Lime Hi			Crop 1 - Fo 2 -		Grass/Tim,		ns/acre) 0.0	N 120-20		2Os 30	K ₂ O 100	Mg 0	S 0	Mn 0	Zn 0	Cu 0	B 0		Informat Note: 12	
Test Results [units - W/V in g/cm²; CEC and Na in meq/100 cm²; NO3-N in mg/dm²]: Soil Class: Mineral																				
нм%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.22	0.85	6.5	85	1.0	6.4	45	18	54	30	30	390	245		76	76	118	0.1	2		
Sample	ID: R2		Reco	mmend	ations:		Lime					Nutri	ents (lb/ac	re)					Mor	e
Lime Hi	story:		1 - F		Grass/Tim,		ns/acre) 0.3	N 120-20		2O5 80	K2 O 100	Mg 0	S 0	Mn 0	Zn 0	Cu 0	B 0		Informat Note: 12	
Test Re	sults [un	its - W/V	in g/cm³	; CEC an	nd Na in m	eq/100	cm³; NO3	-N in mg/	dm³]:				Soil Class	s: Mine	eral					
нм%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.22	0.86	6.0	78	1.3	5.8	23	22	51	25	31	475	302		58	58	62	0.1	2		
Sample	ID: B1		Reco	mmend	ations:		Lime					Nutri	ents (lb/ac	re)					Mor	e
Lime Hi	story:		Crop 1 - Fo 2 -		Grass/Tim,		ns/acre) 0.9	N 120-20		205 130	K2 O 110	Mg 0	0	Mn O	Zn 0	Cu 0	B 0		Informat Note: 12	
Test Re	sults [un	its - W/V	in g/cm³	; CEC an	nd Na in m	eq/100	cm³; NO3	-N in mg/	dm³]:				Soil Class	s: Mine	ral					
нм%	W/V	CEC	B \$ %	Ac	pН	P-I	K-I	Ca%	Mg%	S-I	Mn-I	Mn-Al1	Mn-Al2	Zn-I	Zn-Al	Cu-I	Na	ESP	SS-I	NO ₃ -N
0.27	0.78	6.3	73	1.7	5.4	7	17	57	15	30	914	565		71	71	90	0.1	2		

Schedule for updating CAUV



CAUV Formula: (Net Income Method Appraisal Approach)

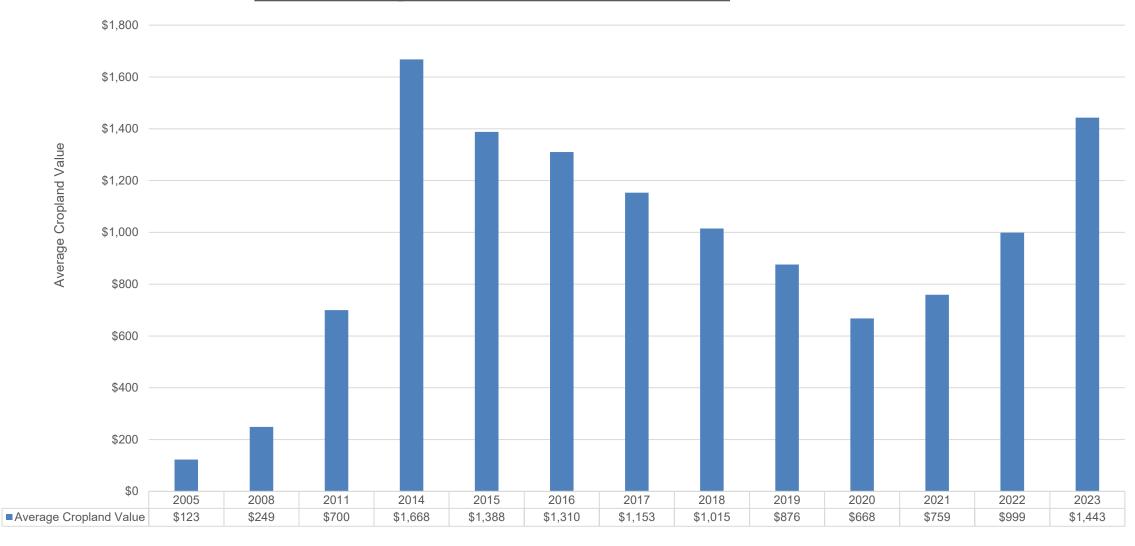
*Gross Income = Price x Yield

(Gross Income* – Total Non-Land Production Costs) / Base Cap Rate

Source: Ohlo Department of Taxation



Average CAUV Value



Ohio Farm Custom Rates Survey 2024

THE OHIO STATE UNIVERSITY

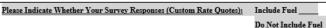
COLLEGE OF FOOD, AGRICULTURAL,
AND ENLUGRAMENTAL SCIENCES.

Spraying late season

(High clearance)

County	Ohio Farm Custom Rate Survey - 2024

We need your assistance in securing up-to-date information about farm custom work rates, machinery and building rental rates and hired labor costs in Ohio. Please respond even if you know only a few rates. We want information on actual rates, either what you paid to hire work or what you charged if you perform custom work. Custom Rates should include all ownership costs of implement & tractor (if needed), operator labor, fuel and lube.





If you wish to complete the survey online, please use this QR code.

Soil Preparation		Mechanical Weed Control	
Stalk Chopper	\$/A	Rotary hoeing S	/A
Moldboard Plow	\$/A	Conventional cultivating	/A
Chisel Plow	\$/A	Weed electrocution	/A
Disk Chisel	\$/A	Airplane/Helicopter Applica	tion (Materials not included)
Disk-Tandem	\$/A	, ,	/A
Disk-High Speed	\$/A		/A
Soil Finishing	\$/A		/A
Field Cultivator	\$/A	Drone/UAV Application (Ma	•
Land leveling per acre	\$ /A	` - /	/A
Subsoiling (8-15 inches de	ep) \$ /A	Seed S Fertilizer S	6/A 6 /A
V-ripping (over 15 in. deep		rentitizer	/A
Strip Tillage	\$ /A	Planting Operations (no see	d or material furnished)
Strip Tillage w/Fert. injecti	·	Plant Corn, 30 in. Rows	\$ /A
Fertilizer/Lime Application (Materials not included)		Plant Corn, 30 in. Rows with Fertilizer Application	\$/A
Dry Bulk, fixed rate	\$/A	Variable rate com planting	\$/A
Variable rate fert, app. Number of produ	\$/A cts applied VR	Plant Soybeans, 15 or 30 in. Row	s \$/A
Liquid, Knife	\$/A	Variable rate soybean planting	\$/A
Liquid, Spray	\$/A	Drill Soybeans	\$/A
Anhydrous	\$/A	Drill Small Grains	\$/A
Late Season N - Coulters	\$/A	Seeding Cover Crops	\$
Late Season N - Drops	\$/A	Grass/Legume/Pasture/Cove	r Crop Seeding
,	\$/A/ <u>Ton</u>	Broadcast	\$/A
Chemical Control of Weed (Materials not included)	s/Insects/Diseases	Broadcast, incorporate (one pass)	· · · · · · · · · · · · · · · · · · ·
Spraying - self-propelled	\$/A	Grain drill	\$/A
Spraying - pull-type	\$ /A	Roller - crimp termination	\$/A

16 1 1 177 16 4 1

- ✓ An online survey option is available at the following link:
- ✓ www.go.osu.edu/customratesurvey





Ohio Cropland Values and Cash Rents Survey '23-'24



Ohio State University Extension Agriculture & Natural Resources http://farmoffice.osu.edu

OHIO CROPLAND	VALUES AND RENTS	SURVEY 2023-2024
---------------	------------------	------------------

1.	County on v	which you are re	porting:							
2.	 Please indicate your <u>primary</u> type of work: Check one category that best describes your work. 									
	Appraiser Ag Lender Farmer Landowner (Landlord) Professional Farm Manager Extension FSA Government Service non-FSA Agri-Sales Agri-Service Other									
3.	In the table below please give your estimate per acre: PER ACRE MARKET LAND VALUE AND CASH RENT, BARE CROPLAND									
					VALUE/ACRE d		NT/ACRE d]			
	mland <u>ality</u>	Average Corn Yield ^a	Average Soybean <u>Yield</u>	2023	Projected 2024	2023	Projected 2024			
Toj	р	bu/A_	bu/A	\$	\$	\$	\$			
Av	erage	<u>bu/A</u>	bu/A	\$	\$	\$	\$			
Во	ttom	<u>bu/A</u>	<u>bu/A</u>	\$	\$	\$	\$			
Tra	insition ^{b]}	XXXX		\$	\$	XX	CXX			
c] / p] [al Long-term average (5 yr.) corn/soybean yields with typical farming practices bl Land that is moving into residential, commercial & industrial uses cl Value of land if sold through an arms-length transaction. dl Cash Rent negotiated in current or recent year.									
4.	From current levels, where do you expect Ohio <u>bare cropland values</u> to be <u>5 years from now?</u> (Check and give percentage estimate where appropriate.) Up, by%No ChangeDown, by%									
5.	5. From current levels, where do you expect Ohio <u>cash rents</u> to be <u>5 years from now?</u> (Check and give percentage estimate where appropriate.) Up, by% No Change Down, by%									
6.	What is you	ır estimate of the	2024 average farm	mortgage interest	rate and operating lo	oan rate?				
Mo	rtgage intere	est rate (20 Year))%	Operating loa	an rate %					
7.	For improve	ed, non-rotation	permanent pasture,	please give your es	timates below for <u>m</u>	arket value and ca	ash rent.			
Ma	rket Sales V	alue \$	per acreC	ash Rent \$	per ac					

- ✓ An online survey option is available at the following link:
- √ https://go.osu.edu/ohiocroplandvaluesca
 shrentssurvey23
 24



Farm Office Upcomind ive le:

January 19

10:00 -

• February 16

11:30 AM

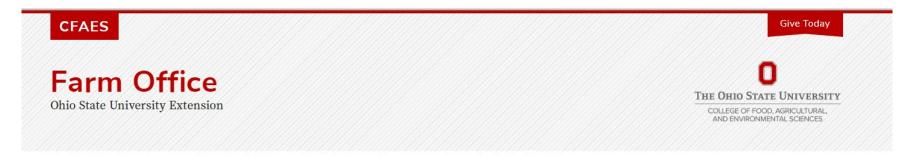
- March 15
- April 19



Farm Office Live is a live webinar series, hosted by our subject matter experts, to bring you the latest ag law and farm management updates. To register please scan the QR code below. Can't make our live webinars? No worries, all webinars are recorded and can be viewed at https://farmoffice.osu.edu/farmofficelive.



https://farmoffice.osu.edu/home



Barry Ward (614) 688-3959 ward.8@osu.edu

