2020 END OF YEAR REVIEW: CROPS AND FARM FINANCES



FARM MANAGEMENT UPDATE FOR AG PROFESSIONALS

Dr. Paul D. Mitchell



Director of the Renk AgriBusiness Institute

Professor of Agricultural and Applied Economics

Extension State Specialist in Cropping Systems Management

Nov 12, 2020

608-320-1162 pdmitchell@wisc.edu https://aae.wisc.edu/pdmitchell/

Remember 2019?

•

'I'm not ready to call it a crisis yet, but it's not good'

UW–Platteville hosts Struggles in Farm Country

By Steve Prestegard *Editor, The Platteville Journal* Oct 17, 2019



WI still leads US states for Chapter 12 farm bankruptcy filings (year ending 9/30/19)





"A lot of farmers are just looking to get this year over with," said Paul Mitchell, director of the Renk Agribusiness Institute. "It's been a bad year."

AND THEN CAME 2020



Coronavirus crisis puts hog farmers in uncharted territory: Killing their healthy livestock

"It's an absolute last resort that is probably the hardest decision farmers will make in their farming careers," the head of a pork producers association said of euthanizing herds.

FARMERS ARE







Goals Today

- Look at the 2020 crop production year in Wisconsin
 - Focus on corn and soybeans, our top crops
- Look at federal support for farmers
 - Lots of acronyms: MFP, ARC/PLC, CFAP, CFAP2, PPP
- Outcome: WI farm income likely up!
 - Does not mean stress is gone
 - Does not mean everyone
- Ideas of things to think about doing with extra income

2019 Prevented Plant



https://www.pioneer.com/us/agronomy/Managing-2019-Prevented-Plant-Acres-2020-Growing-Season.html



9.3 Million Acres Prevent from Being Planted in 2020

Data As of July 31, 2020



AMERICAN FARM BUREAU FEDERATION*

Source: USDA FSA, Farm Bureau Calculations

Prevented Plant Acres 2008-2020



https://farmdocdaily.illinois.edu/2020/08/using-preliminary-fsa-data-to-project-final-prevented-plant-acreage-for-corn-and-soybeans.html

Wisconsin Planting Progress in 2020





https://droughtmonitor.unl.edu/Maps/MapArchive.aspx



https://twitter.com/FarmPolicy/status/1304038279097077760/photo/1

Derecho Aug 10-11, 2020





\$7.5 billion and counting: August derecho that slammed Iowa was most costly thunderstorm in US history, data shows

Andrea May Sahouri Des Moines Register Published 5:01 p.m. CT Oct. 17, 2020 | Updated 5:08 p.m. CT Oct. 17, 2020









% Corn Acres in Excellent Condition in 2020



% Soybean Acres in Excellent Condition in 2020



% Acres in Good to Excellent Condition in 2020

Corn





Wisconsin Harvest Progress in 2020

Corn Silage Corn Grain





Soybean

Wisconsin Average Yield for 2020 (USDA Nov forecast)

Corn 184 bu/ac (new record) Soybean 53 bu/ac (2nd highest)

Corn

Soybean



Coronavirus crisis puts hog farmers in uncharted territory: Killing their healthy livestock

"It's an absolute last resort that is probably the hardest decision farmers will make in their farming careers," the head of a pork producers association said of euthanizing herds.





Ch 12 Bankruptcy Filings by State (Jul 1, 2019 to Jun 30, 2020)



Federal Support for Agriculture in 2020

- 2018 Farm Bill
 - ARC/PLC
 - Dairy Margin Coverage (DMC)
- Market Facilitation Program (MFP) for trade wars
- Paycheck Protection Program (PPP)
- Economic Injury Disaster Loan (EIDL)
- Pandemic Unemployment Assistance (PUA)
- Coronavirus Food Assistance Program (CFAP)
- Coronavirus Food Assistance Program 2 (CFAP2)
- Wisconsin Farm Support Program: WI DOR

Potential \$6 Billion in ARC-CO and PLC Payments in 2019/20*

*Estimate Based on National Average ARC-CO and PLC Enrollment Percentages, Averages Base Acres Across Practice Types and Does Not Include Payment Limits



https://twitter.com/New10 AgEcon/status/1321454813020852225/photo/1

\$9.9 Billion in Coronavirus Food Assistance Program Direct Payments

As of September 13, 2020, Million Dollars



\$7.6 Billion in Total CFAP 2 Support

As of October 25, 2020, Million Dollars











Nearby or New-Crop Agricultural Futures Prices Since COVID-19

Cumulative Percent Change in Futures Price mid-March to Present



Main Point

- 2020 was a good production year in Wisconsin
- Federal income support has poured into ag at unprecedented levels
 - 2018 Farm Bill, Trade Wars, Pandemic
- Crop and Livestock prices have rebounded
- Many Wisconsin farmers are looking at a high-income year after several yeas of tight money
- What's a farmer to do?

Tax Management

Rate	Single	Married Filing Joint
10%	< \$9,875	< \$19,750
12%	\$9,876-\$40,125	\$19,751-\$80,250
22%	\$40,126-\$85,525	\$80,251-\$171,050
24%	\$85,526-\$163,300	\$171,051-\$326,600
32%	\$163,301-\$207,350	\$326,601-\$414,700
35%	\$207,351-\$518,400	\$414,701-\$622,050
37%	>\$518,400	>\$622,050

Self Employment Taxes

- 15.3% on the 1st
 \$132,900
- 2.9% on the amount above that

Ordinary Income plus Self Employment Taxes



Effective Total Tax Rate



What to do with extra money?

- Do not overly focus on spending just to avoid taxes, but to increase profits by increasing productivity and/or reducing costs
- 1) Replace capital assets or invest in new assets
- 2) Increase working capital to improve financial risk management
- 3) Pay off dead weight debt

#1 Replace Capital Assets or Buy New Assets

- Farms have been putting off asset replacement for years due to tight money
- A) Replace necessary assets: tractor, combine, chopper, ...
- B) Invest in updates/expansion: new parlor, robotic milking, cows, land ...
- The key will be to buy PRODUCTIVE assets (not avoiding taxes)
 - Generate rates of return exceeding the interest rate (opportunity cost)
 - Reduce costs for future profitability
- Section 179 a popular way to buy assets and fully depreciate them to greatly reduce taxes now and avoid self employment taxes when sell
 - Machinery, equipment, cattle, grain bins, fence, tile drainage, milking parlor
 - CANNOT use for land or multiple use buildings: confirm with tax accountant
 - Rules have changed on amounts as well

Depreciation: The Hidden Cost

- Buy assets to avoid 28-31% taxation, but forget about deprecation
- Don't write a check for it, so forget about it, but it's a real cost
- Capital Recovery Factors: to estimate cost of depreciation and interest/opportunity cost for machinery
- Be sure you actually need the machinery and that it will improve your productivity and/or reduce your costs, as you will be paying for it
- Estimating Farm Machinery Costs, ISU Extension
 <u>https://www.extension.iastate.edu/agdm/crops/html/a3-29.html</u>

Annual Cost for Deprecation and Interest/Opportunity Cost per \$100,000 of Machinery Purchased

Interest Rate	Capital Recovery Factor			Annual Cost \$/\$100,000		
Opportunity Cost	Tractor	Combine	Implement	Tractor	Combine	Implement
2%	0.078	0.078	0.111	\$6,350	\$6,930	\$8,370
3%	0.084	0.084	0.117	\$7,050	\$7,590	\$9,090
4%	0.090	0.090	0.123	\$7,750	\$8,250	\$9,810
5%	0.096	0.096	0.130	\$8,450	\$8,910	\$10,600
6%	0.103	0.103	0.136	\$9,225	\$9 <i>,</i> 655	\$11,320
7%	0.110	0.110	0.142	\$10,000	\$10,400	\$12,040
8%	0.117	0.117	0.149	\$10,775	\$11,145	\$12,830
9%	0.124	0.124	0.156	\$11,550	\$11,890	\$13,620
10%	0.131	0.131	0.163	\$12,325	\$12,635	\$14,410

Tractor 15 years, 25% Salvage. Combine 15 years, 15% Salvage. Implement 10 years, 30% Salvage

Annual Cost for Deprecation and Interest/Opportunity Cost per \$100,000 of Machinery Purchased

Interest Rate		Capital Recovery Factor			Annual Cost \$/\$100,000		
Opportunity Cost		Tractor	Combine	Implement	Tractor	Combine	Implement
2%		0.078	0.078	0.111	\$6,350	\$6,930	\$8,370
3%		0.084	0.084	0.117	\$7,050	\$7,590	\$9,090
4%	These	cost only	for depre	\$7,750	\$8,250	\$9,810	
5%	and opportunity cost, not operating				\$8,450	\$8,910	\$10,600
6%	costs (fuel, maintenance)				\$9,225	\$9,655	\$11,320
7%		0.110	0.110	0.142	\$10,000	\$10,400	\$12,040
8%		0.117	0.117	0.149	\$10,775	\$11,145	\$12,830
9%		0.124	0.124	0.156	\$11,550	\$11,890	\$13,620
10%		0.131	0.131	0.163	\$12,325	\$12,635	\$14,410

Tractor 15 years, 25% Salvage. Combine 15 years, 15% Salvage. Implement 10 years, 30% Salvage

#2 Increase Working Capital

- Working Capital = Current Assets Current Liabilities
- Liquid cash for unexpected costs or opportunities, a rainy-day fund for financial risk management
 - Sufficient cash so rely less on revolving line of credit and thus save interest costs
 - Spending less time managing cash flow and finances, focus on farming
 - Take advantage of opportunities when they arise

US Farm Sector Working Capital



#3 Pay Off Dead Weight Debt

- Debt that did not/does not create returns above the interest rate, creating a drag on future profitability
 - Stuck paying interest when could be moving forward on equity
- Pay it off and move on
- Refinance or consolidate operating loans and/or revolving lines of credit into lower interest long-term debt
- Create breathing room so can make money when profitability returns





Summary

- 2020 was a good production year in Wisconsin
 - High yields, promising price trends
- Lots of federal support has come to farmers
- Many Wisconsin farmers are looking at a high-income year
- What's a farmer to do?
 - 1) Replace capital assets or invest in new assets
 - 2) Increase working capital
 - 3) Pay off dead weight debt

Questions? Comments?

Paul D. Mitchell

Director Renk AgriBusiness Institute

Professor of Ag & Applied Econ, UW-Madison

UW Extension State Specialist

pdmitchell@wisc.edu 608-265-6514

2021 Ag Outlook Forum COVID-19 and Opportunities for Wisconsin Agribusiness https://renk.aae.wisc.edu/2021agricultural-outlook-forum/





