


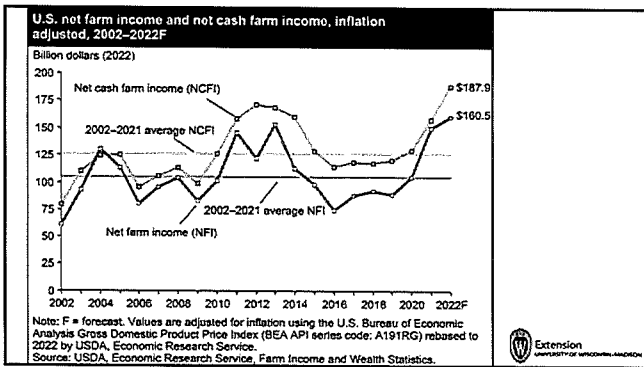
Crop Input Challenges

Western WI Agriculture Lenders Conference
January 5, 2023

Jerry Clark
Agriculture Educator
Chippewa County
Division of Extension UW-Madison




1



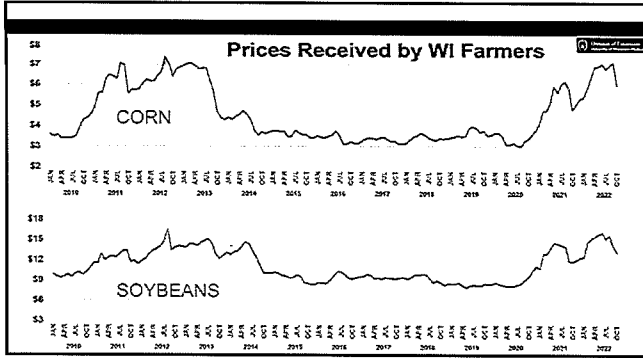
2

Current Farm Financial Situation

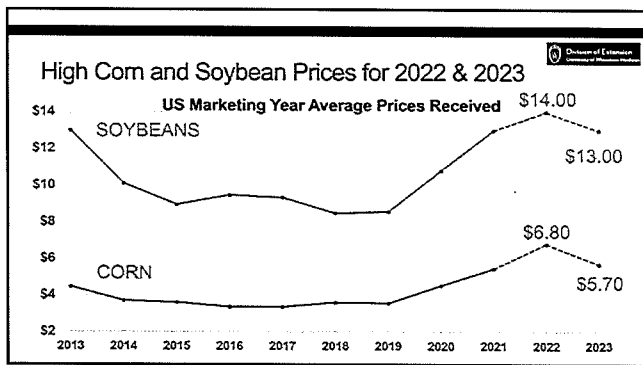
- Record high US Net Farm Income, 53% above its 20-year average
- High yields and prices in 2021 and 2022 for corn and soybeans
- Prices expected to be a little lower, but still high for 2023
- Livestock revenues are up in 2021 and 2022: dairy and cattle
- Large government payments in last few years, now back to normal
- Farms paid off debts, balance sheets have improved, bought land with low interest rates and additional government payments
- Average WI farm is in solid financial position going into 2023
- What's on farmers' minds for 2023?



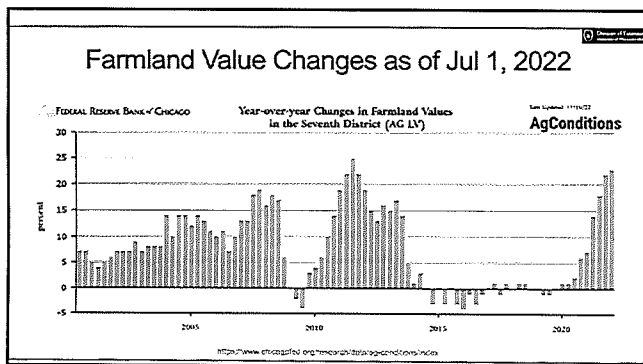
3



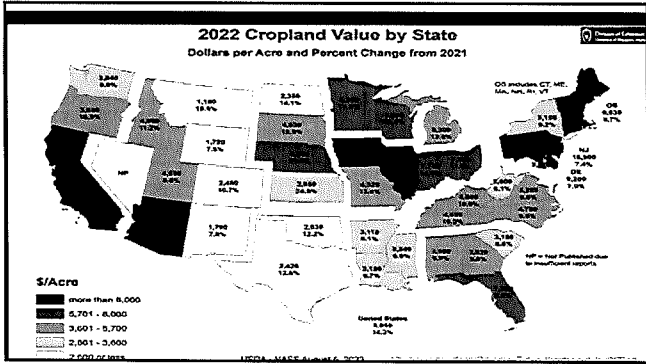
4



5



6

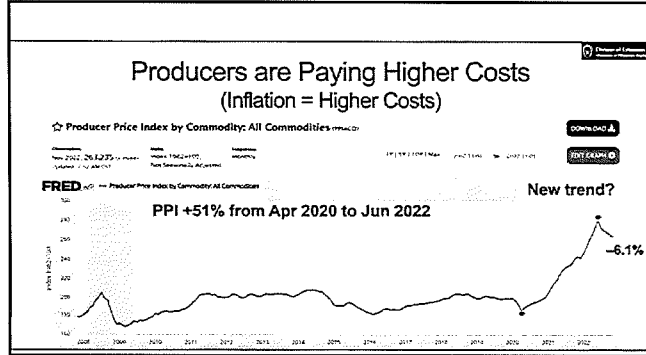


7

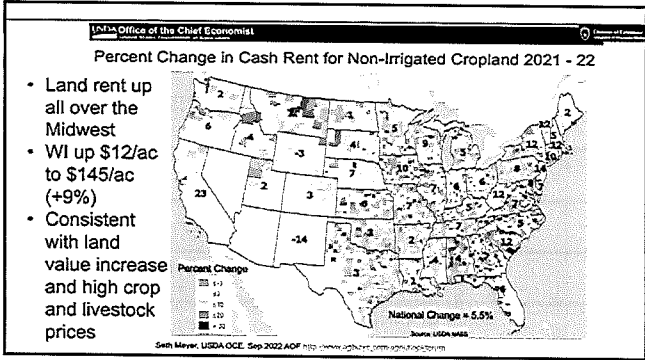
Range in sales "continuing farmland" - 2021

County	Low	High
Barron	2,117	5,051
Buffalo	3,543	5,300
Chippewa	2,292	6,015
Dunn	2,163	7,500
Eau Claire	2,780	6,584
Jackson	2,488	4,979
Pierce	3,158	13,448
Polk	2,151	6,300
St. Croix	2,776	13,544

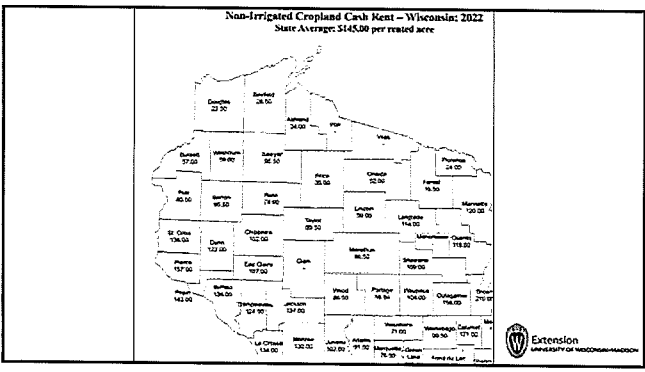
8



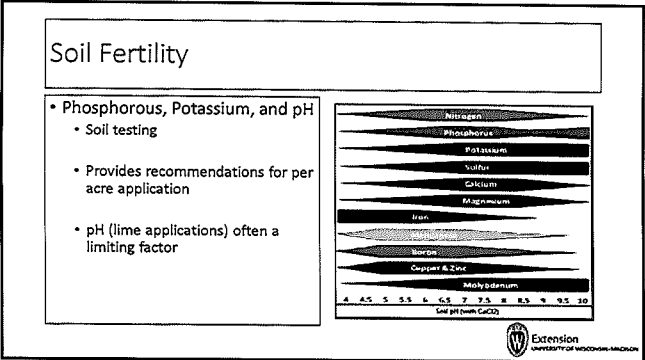
9



10



11



12

Soil Fertility – Nitrogen Management

Site Info

2018

2019

2020

2021

Previous Crop #	Soil Field Production #	Yield #
Alfalfa 2	High 25	Soil 1
Corn 18	Medium 14	Chop 5
Green Hay 2	Sandy 10	None 1
Hay 1		
Small Grains 4	Impaction 8	Tillage 7
Soybean 21		

13

Soil Fertility – Nitrogen Management

No relationship between yield and EONR

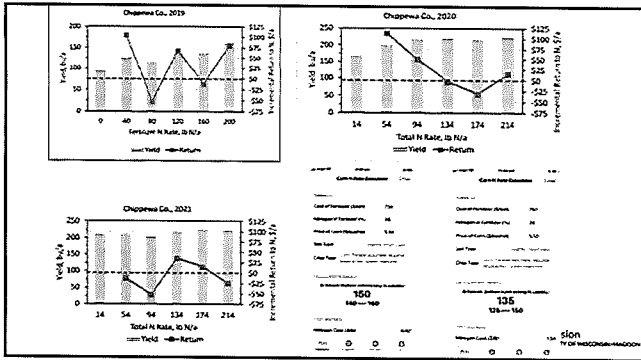
14

Soil Fertility – Nitrogen Management

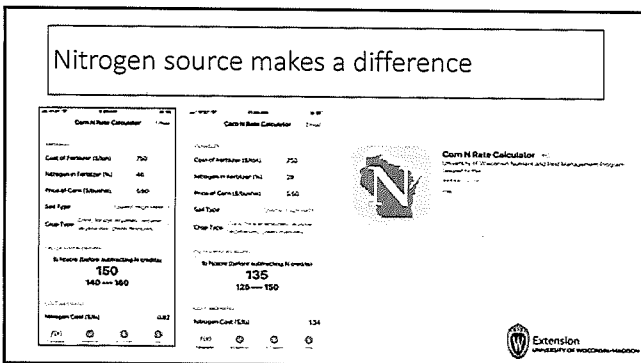
Soil N supplies 13 to 100% of total yield

Previous Crop	% of Yield supplied by soil N
Corn	44 (13-100)
Soybean	69 (13-100)

15



16



17


Solid Manure		Potash S/#	Potash #	Value \$
Manure Value		0.34	10.00	\$3.40
		DAP S/#	DAP #	
		0.45	6.52	\$2.93
		Urea S/#	Urea #	
		0.34	3.97	\$1.35
	Fertilizer Value/ton Manure			\$7.68
	*Fertilizer Value per cow/year at 1400 lbs			\$477.48
Liquid Manure		Potash S/#	Potash #	Value \$
		0.34	28.33	\$9.63
		DAP S/#	DAP #	
		0.45	13.04	\$5.87
		Urea S/#	Urea #	
		0.34	16.64	\$5.66
	Fertilizer Value/1000 gallons Manure			\$21.16
	*Fertilizer Value per cow/year at 1400 lbs (1)			\$347.14

18

Seed Costs

- Projections are steady prices
 - Supply is good
 - Early order lower prices
- Hybrids/varieties
 - Technology fees
 - Refuge areas
- Seeding Population
 - Soybeans = Final 100,000 plants
 - Corn = Yield plateau adjustments

- Hybrid and variety selection
 - Corn (+/-) 70 bushels
 - Soybean (+/-) 25 bushels



19

Crop Seed Price Calculator

<http://corn.agronomy.wisc.edu/Season/DSS.aspx>

Crop Seed Price Calculator v1.2 written by John Lawlor, University of Wisconsin (September 2008)

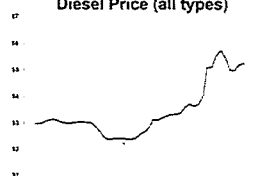
1. Predicted Final Yield (bu/A)		100.00
2. Hybrid (Variety)	Hybrid A	Hybrid B
3. Seed Price (\$/bu)	\$1.00	\$1.00
4. Kernel, Corns per bag (No. bag)	32,000	32,000
5. Seed Population (plants/acre)	32,000	32,000
6. Refilling Seed Depth (%)	0	0
7. Actual per bag (Actual bu)	32,000	32,000
8. Seed Cost (\$/acre)	\$32,000	\$32,000
9. Refilling Cost (\$/acre)	\$0.00	\$0.00
10. Fungicide Cost (\$/acre)	\$0.00	\$0.00
11. Insurance Cost (\$/acre)	\$0.00	\$0.00
12. Harvest Moisture (%)	30.0	30.0
13. Drying (\$/bu/1000)	\$0.00	\$0.00
14. Drying Cost (\$/bu/1000)	\$0.00	\$0.00
15. Harvesting Cost (\$/bu/1000)	\$0.00	\$0.00
16. Harvesting Cost (\$/bu/1000)	\$0.00	\$0.00
17. Planting Cost (\$/bu/1000)	\$0.00	\$0.00
18. Change Cost (\$/bu/1000)	\$0.00	\$0.00
19. Yield adjustment (\$/bu/1000)	\$0.00	\$0.00
20. Total Seed Cost (\$/acre)	\$32,000	\$32,000

Economic advantages (\$/acre) of Hybrid A or Hybrid B. Seed price difference is \$50 per bag; A is \$750, Hybrid B is \$710		Seed Price (\$/bushel)					
Yield advantage bushels/acre	Hybrid A	Hybrid B	Seed Price (\$/bushel)				
			\$1.00	\$2.00	\$3.00	\$4.00	\$5.00
14	234	224	224	211	242	2106	2110
12	204	244	254	272	242	2104	2104
10	202	242	252	262	272	2102	2102
8	202	232	242	254	262	2102	2102
6	202	234	242	242	252	2102	2102
4	202	232	234	238	242	2102	2102
2	202	224	234	234	234	2102	2102
Hybrid A is cheaper	6	202	232	232	232	2102	2102
Hybrid B is cheaper	2	202	214	214	214	2102	2102
Hybrid A	4	214	214	214	214	2102	2102
Hybrid B	8	214	214	214	214	2102	2102
Yield more than Hybrid B	10	212	212	212	212	2102	2102
Hybrid B	12	210	210	210	210	2102	2102
	14	208	208	208	208	2102	2102

20

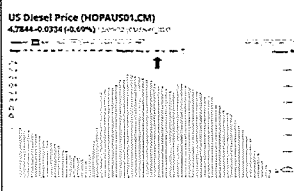
Diesel fuel prices have been high, but futures are falling

US Monthly Average On-Highway Diesel Price (all types)

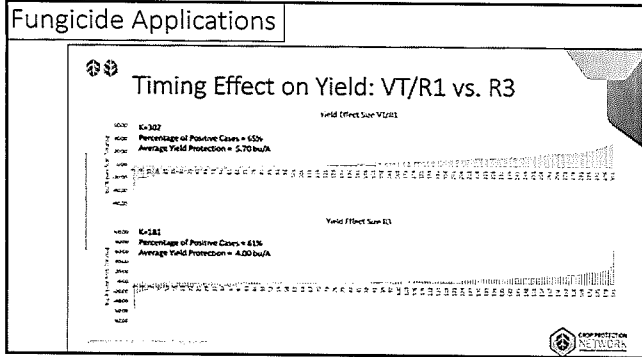


3-Month Diesel Futures Price

US Diesel Price (MOPAU001.CM) 4.7844-02254 (44.69%)



21



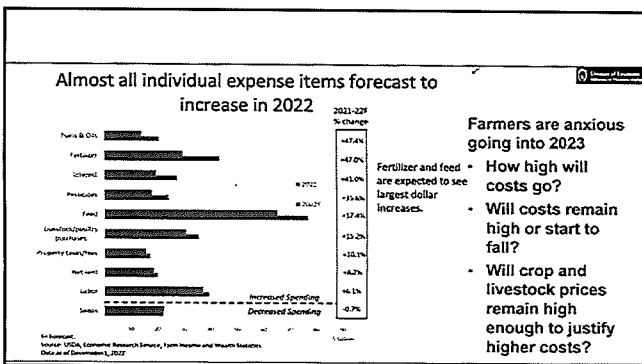
22

Herbicide Costs

- Supply is better
- Cost is still high
 - 20% to 30% increase
- Monitor farms with resistant weed issues
- Increase in use of pre-emergence herbicides
 - # of passes
 - costs

Source: University of Minnesota Extension, Herbicide Costs

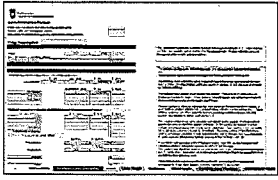
23




24

Crop Budget Analyzer Tool

- Created by area extension educators
- Updated Annually
- Can be customized for producers





25

Recommendations for Managing Input Costs

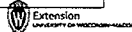
- Fertilizer prices currently stable at prevailing high levels
 - Futures markets suggest fertilizer prices may decline some, but lots of uncertainty from energy prices, Ukraine/Russia war, and logistics
 - Buy before March, as prices tend to be above average during planting rush
- Chemicals: Up 30% to 35% from 2022
 - Buy before planting/spraying rush, as prices tend to be above average then
- Crop Insurance: Crop prices about same as last year, out of your control
 - Buy Revenue Protection with 70-80% coverage level, Enterprise Units
- Fuel costs are trending downward, so wait to buy, but not too long
 - NOAA predicts cold winter, lots of uncertainty from Ukraine/Russia war

26

Questions?


Jerry Clark
 Chippewa County
 Extension UW-Madison
 715-726-7955
Jerome.clark@wisc.edu

Acknowledgment: Dr. Paul Mitchell, UW-Madison, Agriculture and Applied Economics



27

Evaluation



• <https://go.wisc.edu/g2qn15>

