

Agricultural Markets Situation and Outlook

April 15, 2021

Use the Q&A tool
to ask questions

North Dakota Land Values and Cash Rents for Pasture and Cropland

Bryon Parman

Cell – 701-261-5919

Bryon.Parman@ndsu.edu

The logo for NDSU Extension is a dark green rectangle. On the left side, the letters "NDSU" are written in a bold, yellow, serif font. A thin white vertical line is positioned to the right of "NDSU". To the right of this line, the word "EXTENSION" is written in a smaller, yellow, sans-serif font.

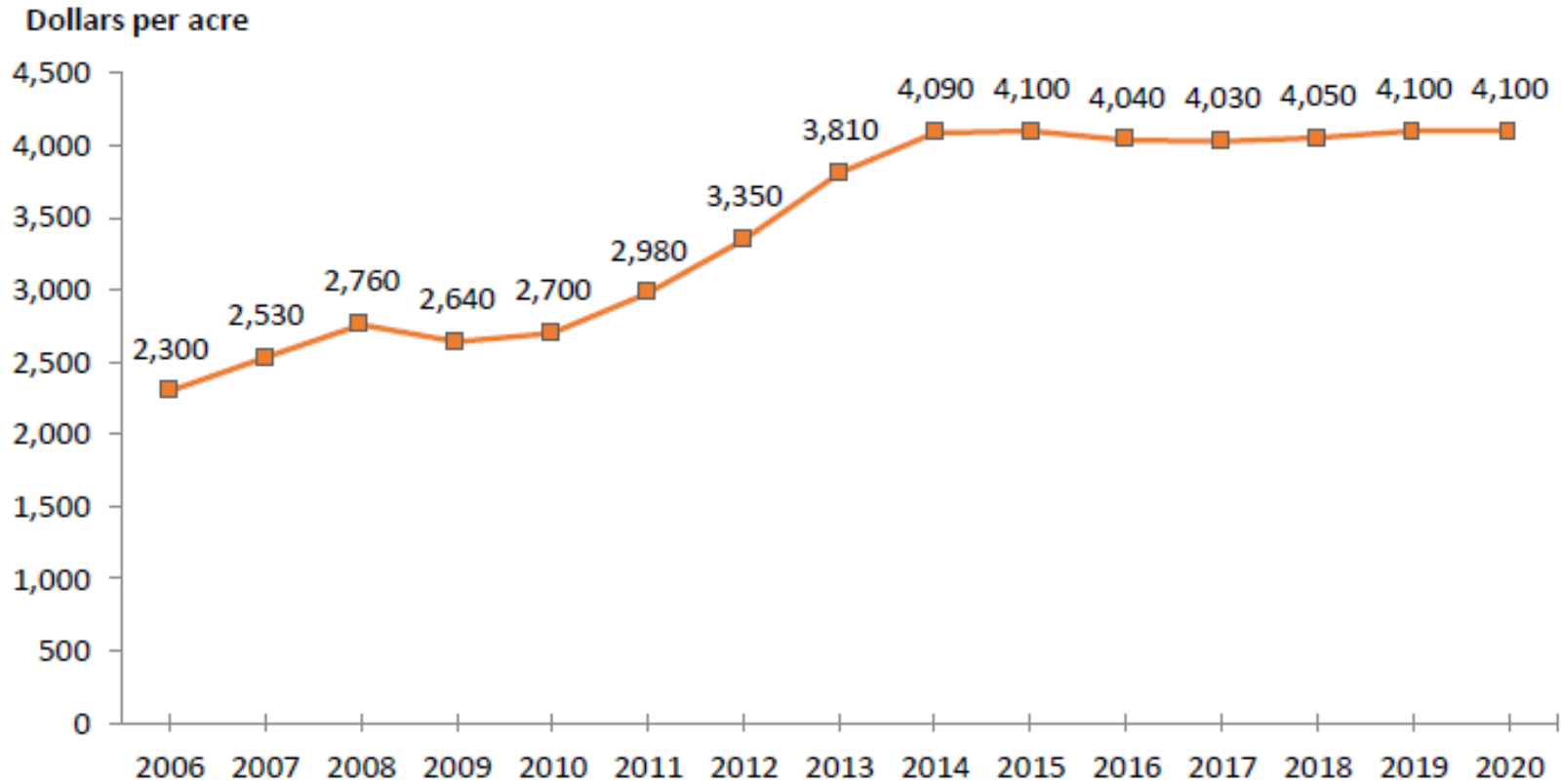
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EXTENSION AGRIBUSINESS

Average Cropland Value – United States: 2006-2020



USDA - NASS
August 6, 2020

2015: \$35.40
 2016: \$35.70
 2017: \$36.40
 2018: \$34.50
 2019: \$37.00
 2020: \$34.50
2021: \$35.00

2015: \$51.10
 2016: \$50.10
 2017: \$51.20
 2018: \$51.30
 2019: \$50.00
 2020: \$51.60
2021: \$51.10

2015: \$57.60
 2016: \$56.30
 2017: \$58.40
 2018: \$56.70
 2019: \$56.70
 2020: \$56.40
2021: \$58.40

Statewide average
 +0.77%
 2021: \$65.80/acre

2015: \$91.00
 2016: \$88.70
 2017: \$89.60
 2018: \$80.80
 2019: \$90.40
 2020: \$89.70
2021: \$92.00

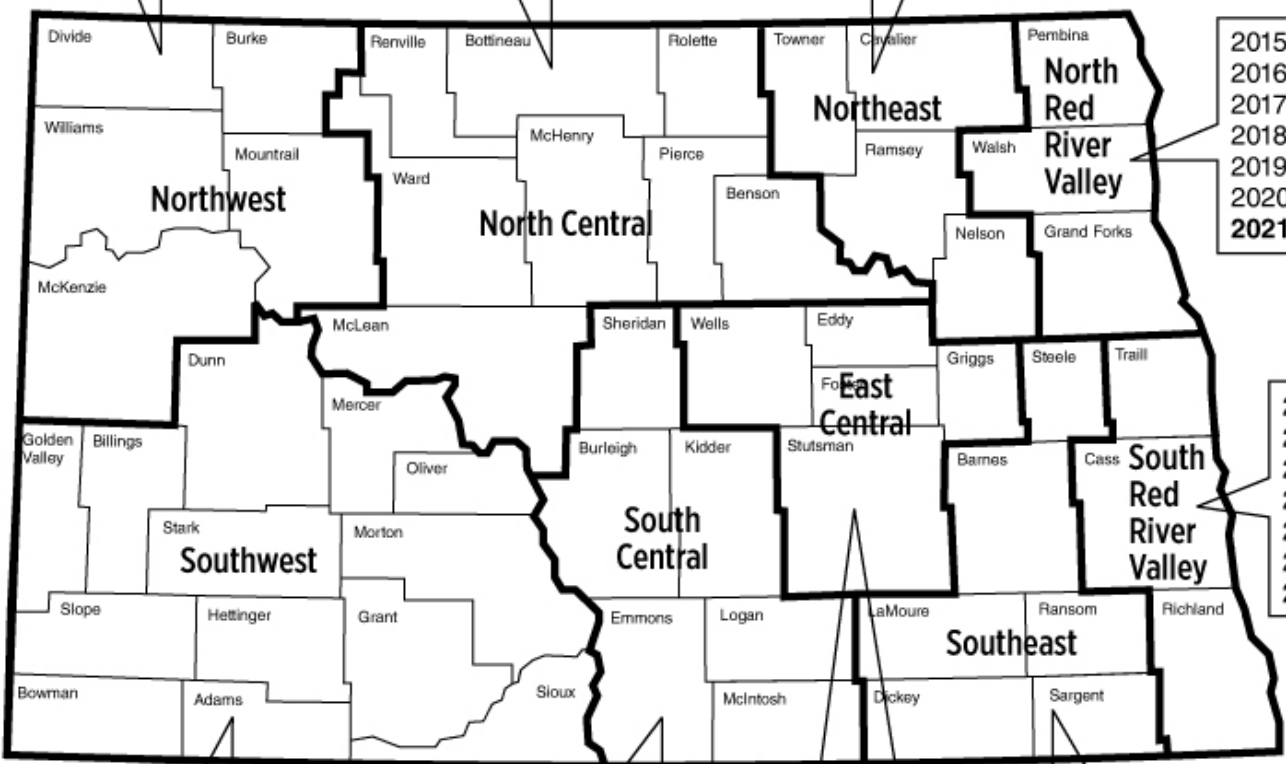
2015: \$125.50
 2016: \$122.30
 2017: \$124.60
 2018: \$118.20
 2019: \$125.90
 2020: \$126.70
2021: \$128.40

2015: \$38.60
 2016: \$38.00
 2017: \$38.40
 2018: \$36.90
 2019: \$37.80
 2020: \$36.50
2021: \$37.00

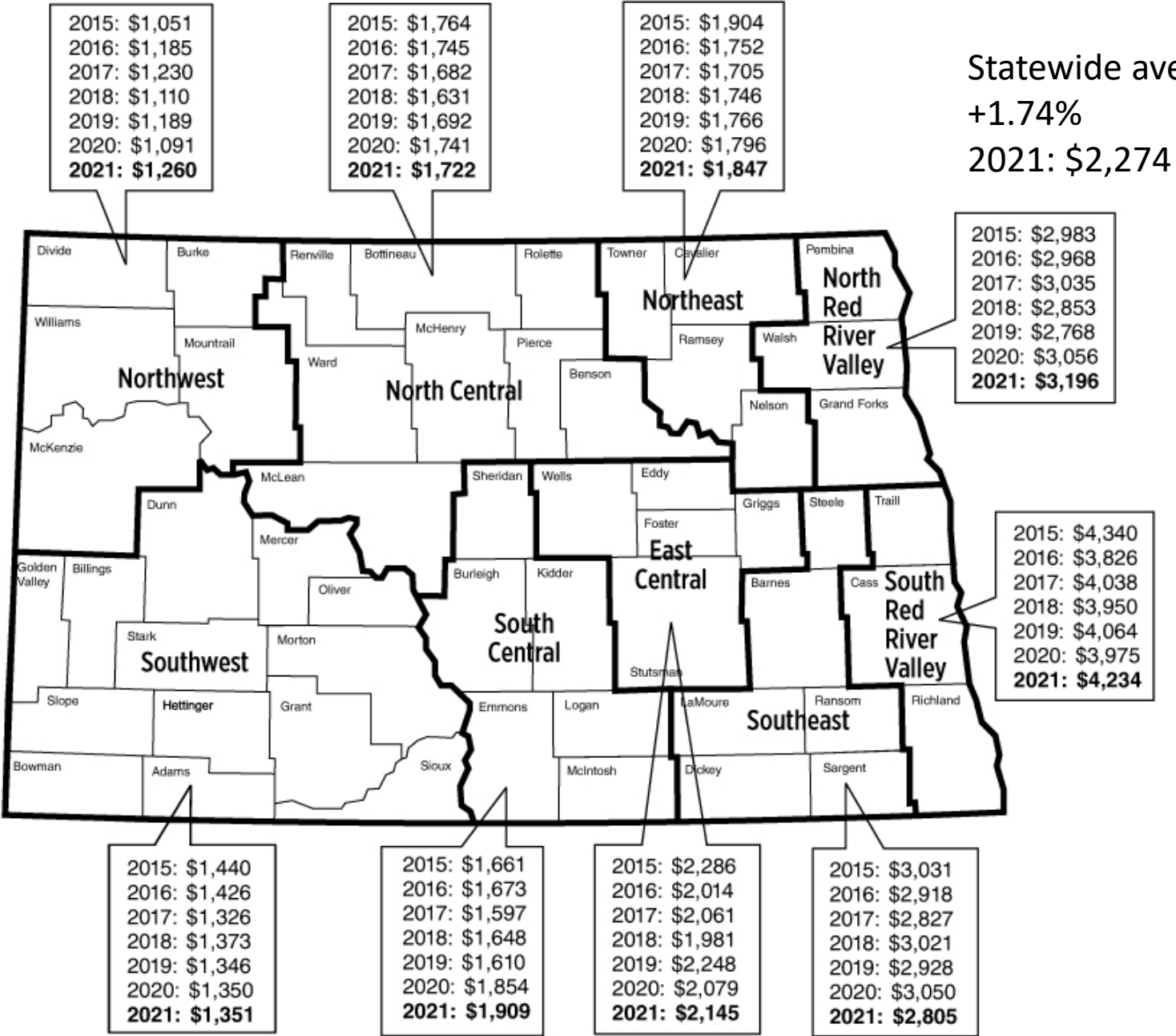
2015: \$64.30
 2016: \$56.90
 2017: \$58.70
 2018: \$51.50
 2019: \$56.80
 2020: \$55.00
2021: \$56.00

2015: \$71.20
 2016: \$66.60
 2017: \$67.60
 2018: \$67.00
 2019: \$67.60
 2020: \$68.90
2021: \$69.50

2015: \$98.30
 2016: \$95.60
 2017: \$99.80
 2018: \$95.00
 2019: \$96.70
 2020: \$96.50
2021: \$94.70



Estimated average cash rent per acre of cropland in North Dakota from 2015 to 2021.

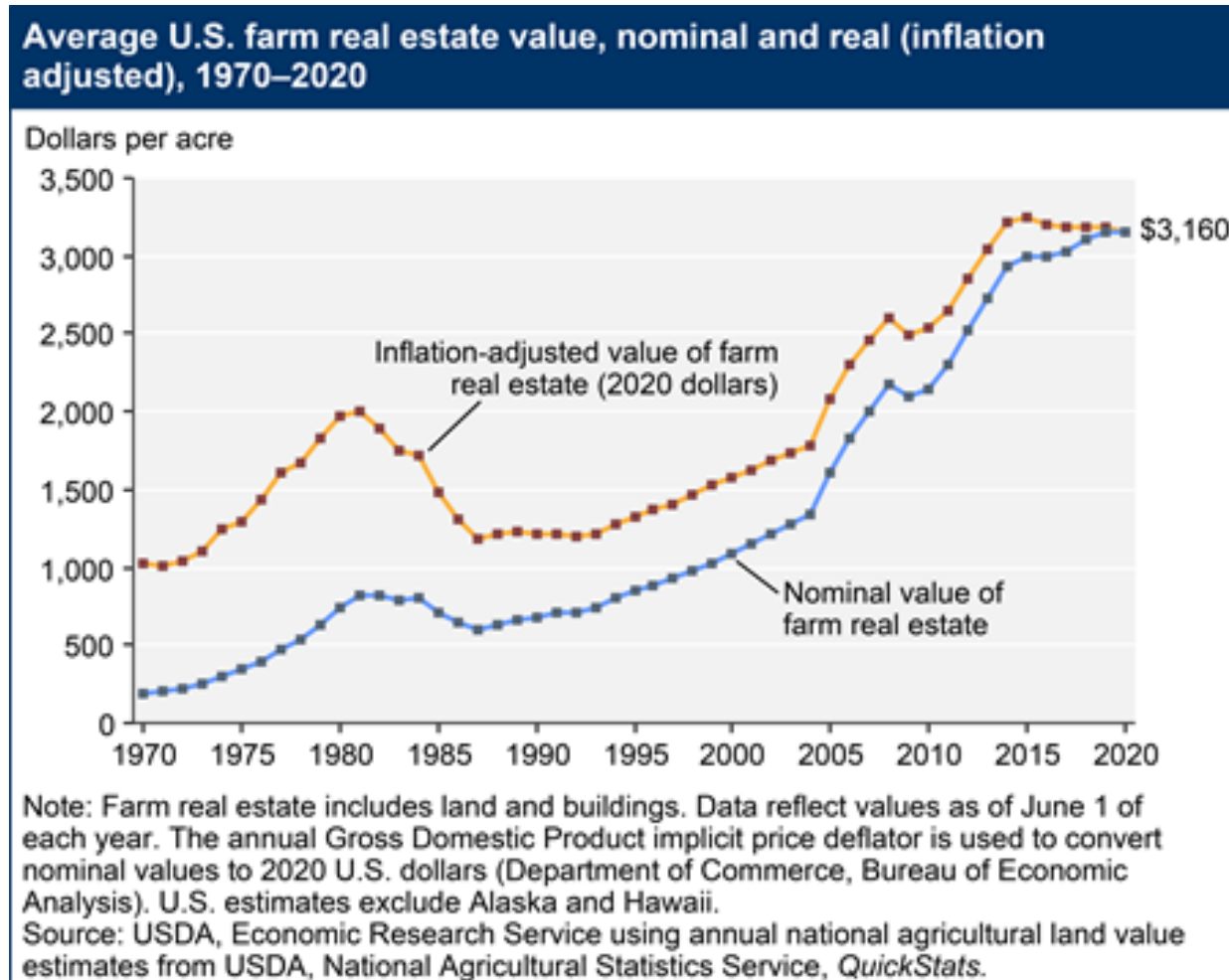


Estimated average per-acre values of cropland in North Dakota from 2015 to 2021.

2021 North Dakota Land Values

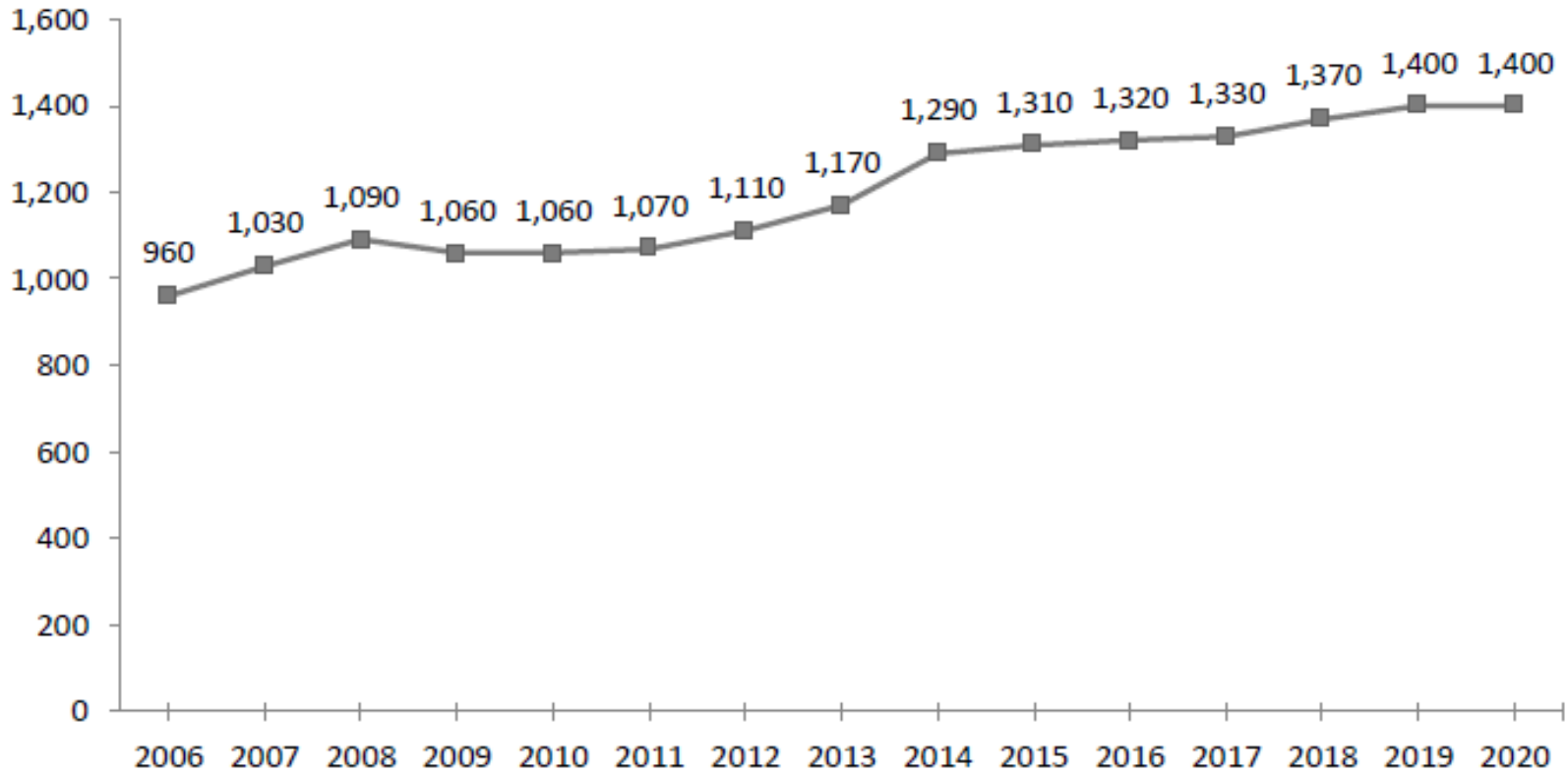
	Rental Rate	Land Value	Percent Rent Change	Percent Land Value Change
Northwest	\$35.00	\$1,260	1.32%	15.50%
North-central	\$51.10	\$1,722	-1.00%	-1.06%
Northeast	\$58.40	\$1,847	3.56%	2.83%
North Valley	\$92.00	\$3,196	2.65%	4.59%
Southwest	\$37.00	\$1,351	1.36%	0.06%
South-central	\$56.00	\$1,909	1.95%	2.97%
Southeast	\$94.70	\$2,805	-1.88%	-8.03%
South Valley	\$128.40	\$4,234	1.40%	6.52%
East-central	\$69.50	\$2,145	0.81%	3.20%

August 2020 USDA Farm land Values



Average Pasture Value – United States: 2006-2020

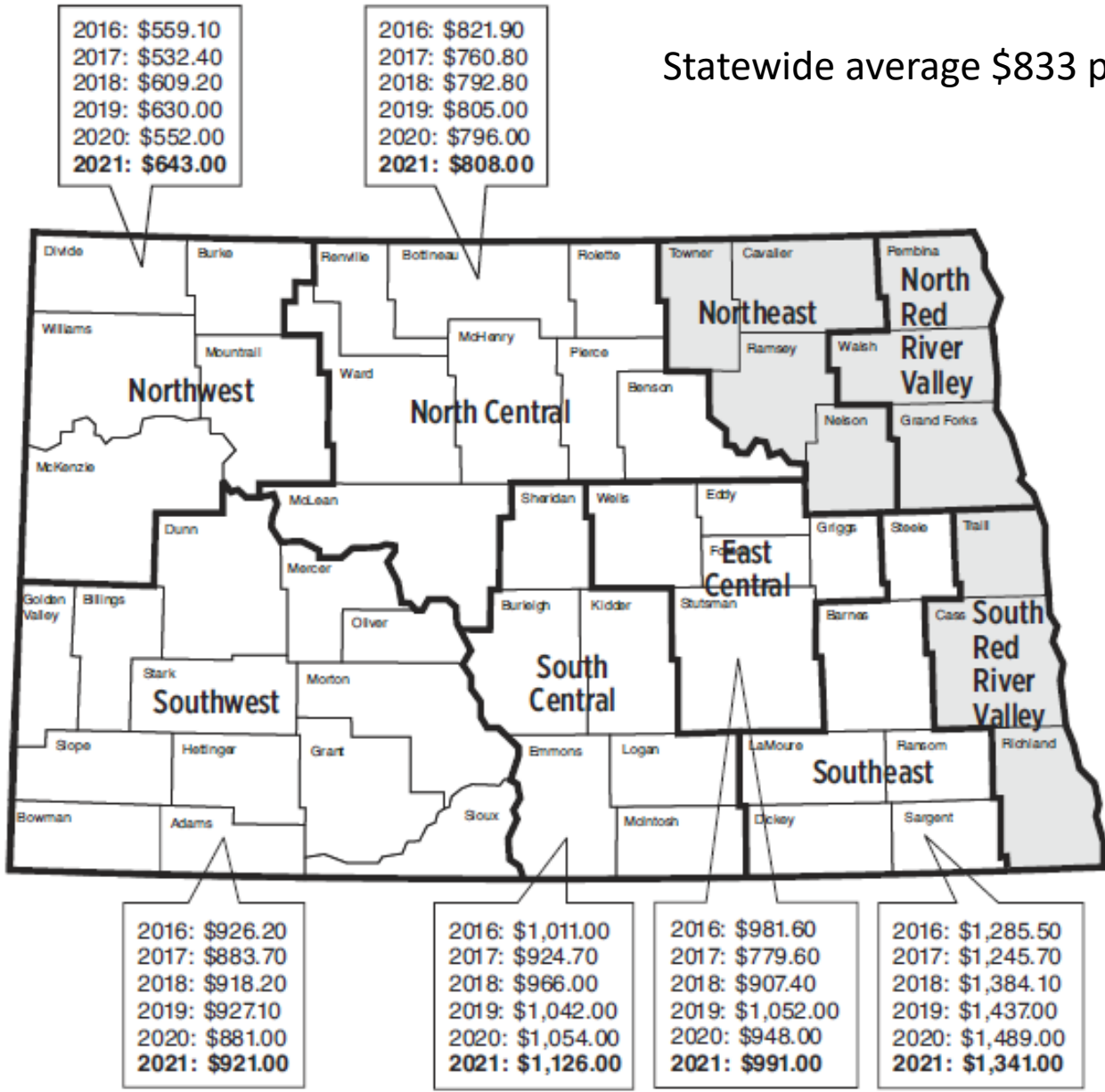
Dollars per acre



USDA - NASS

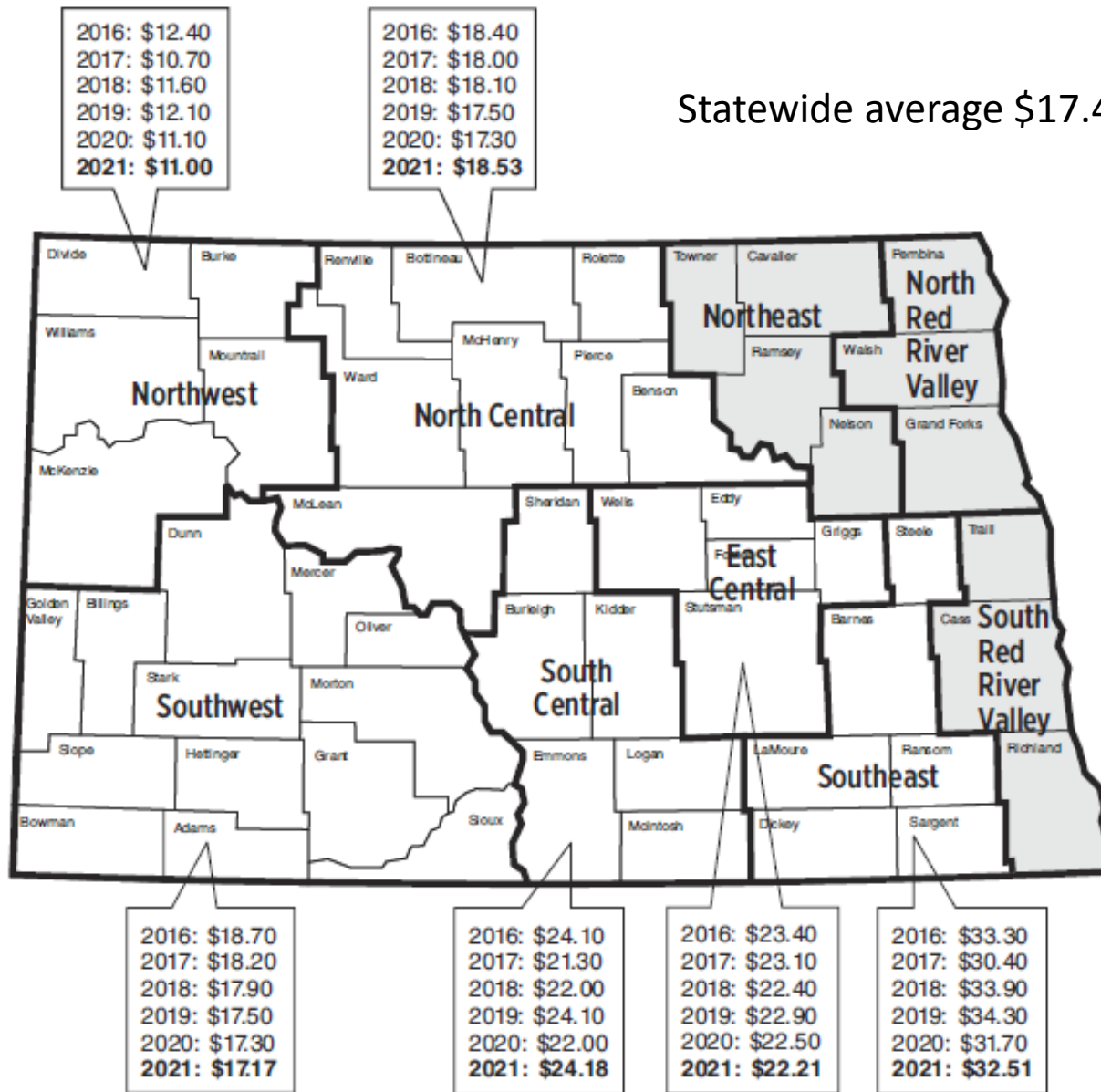
August 6, 2020

Statewide average \$833 per acre



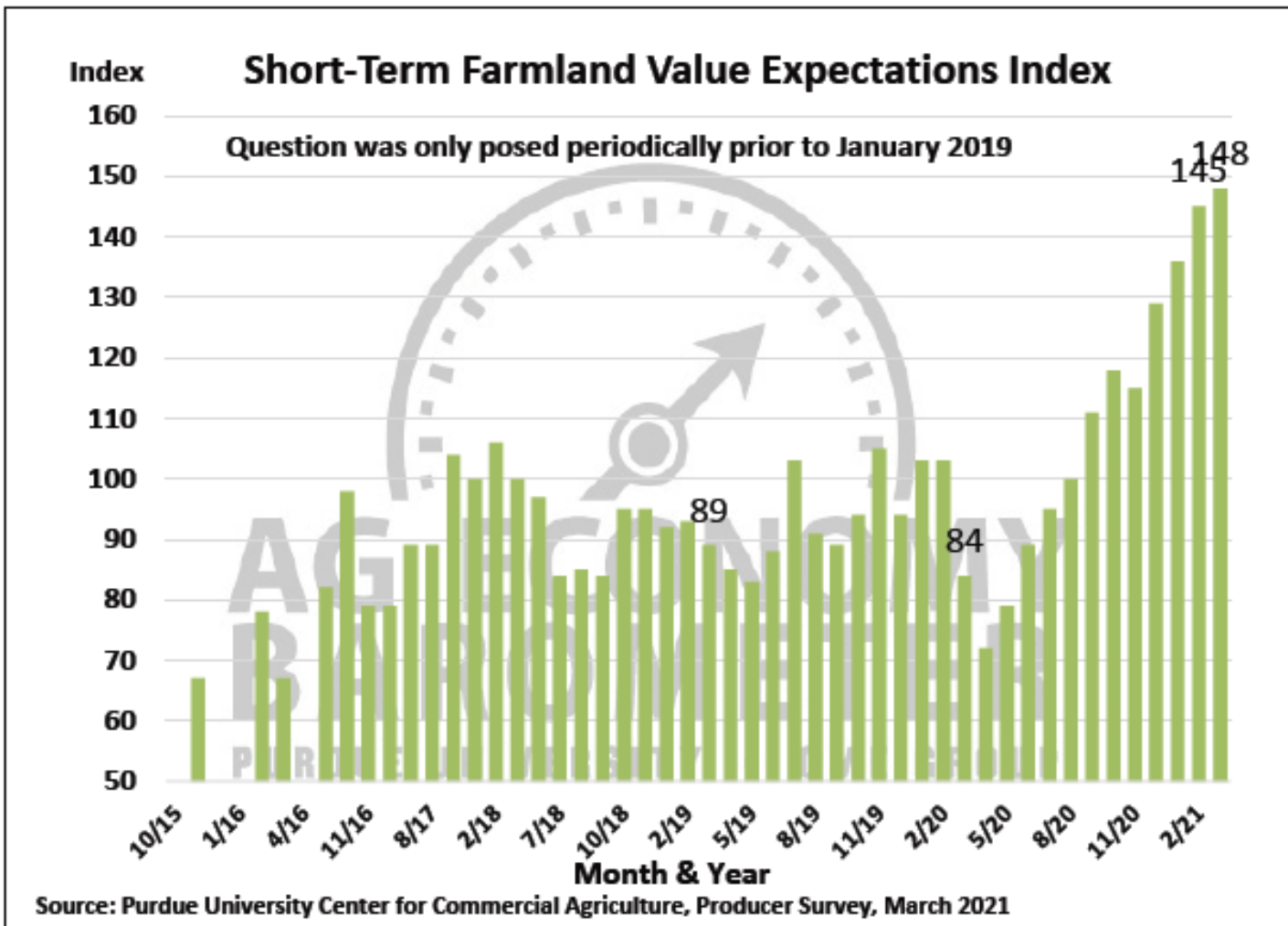
Estimated average per acre values of pasture in North Dakota from 2016 to 2021.

Statewide average \$17.40 per acre

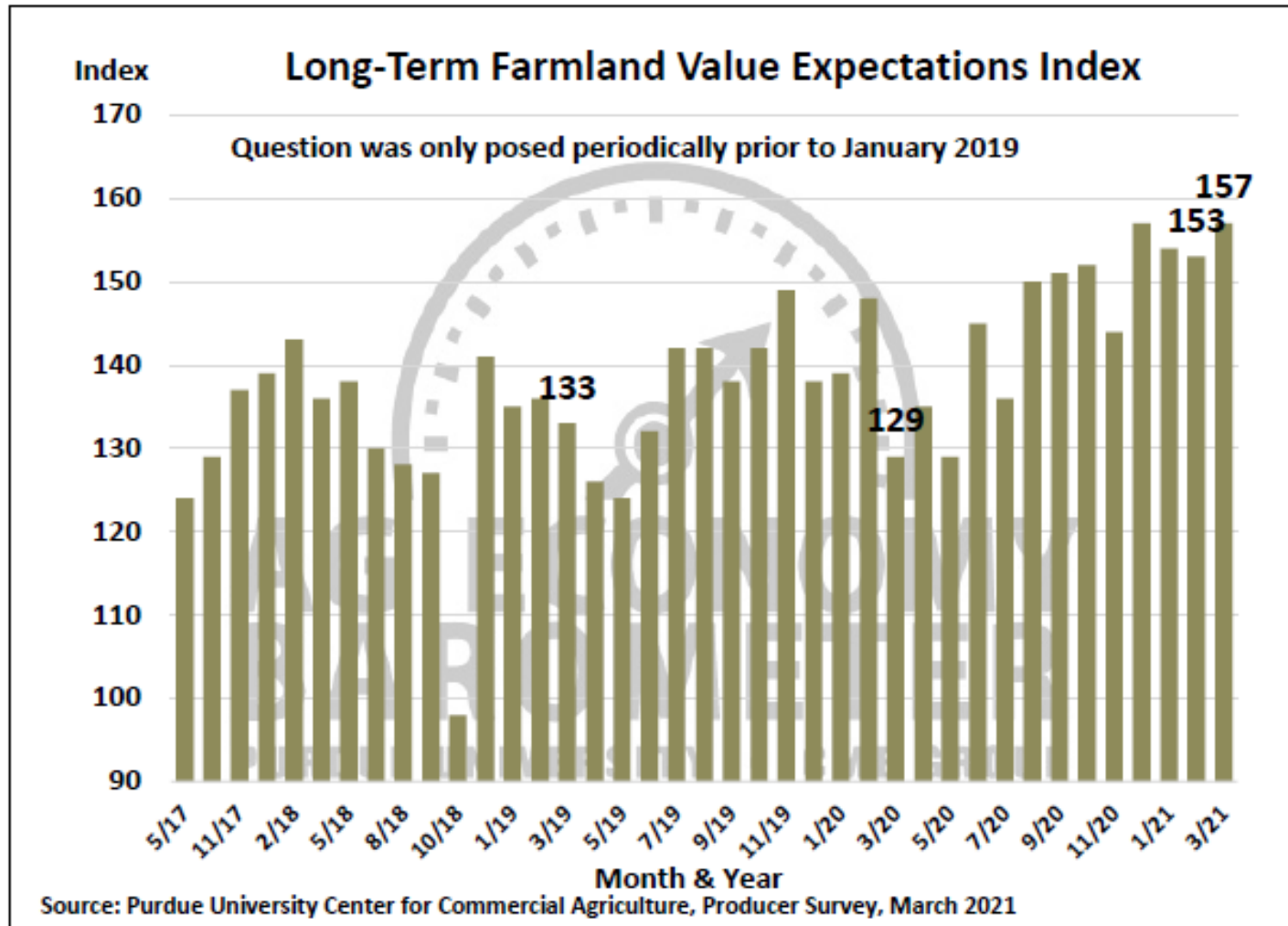


Estimated average cash rent per acre of pasture in North Dakota from 2016 to 2021.

Purdue Ag Economy Barometer – 12 Month



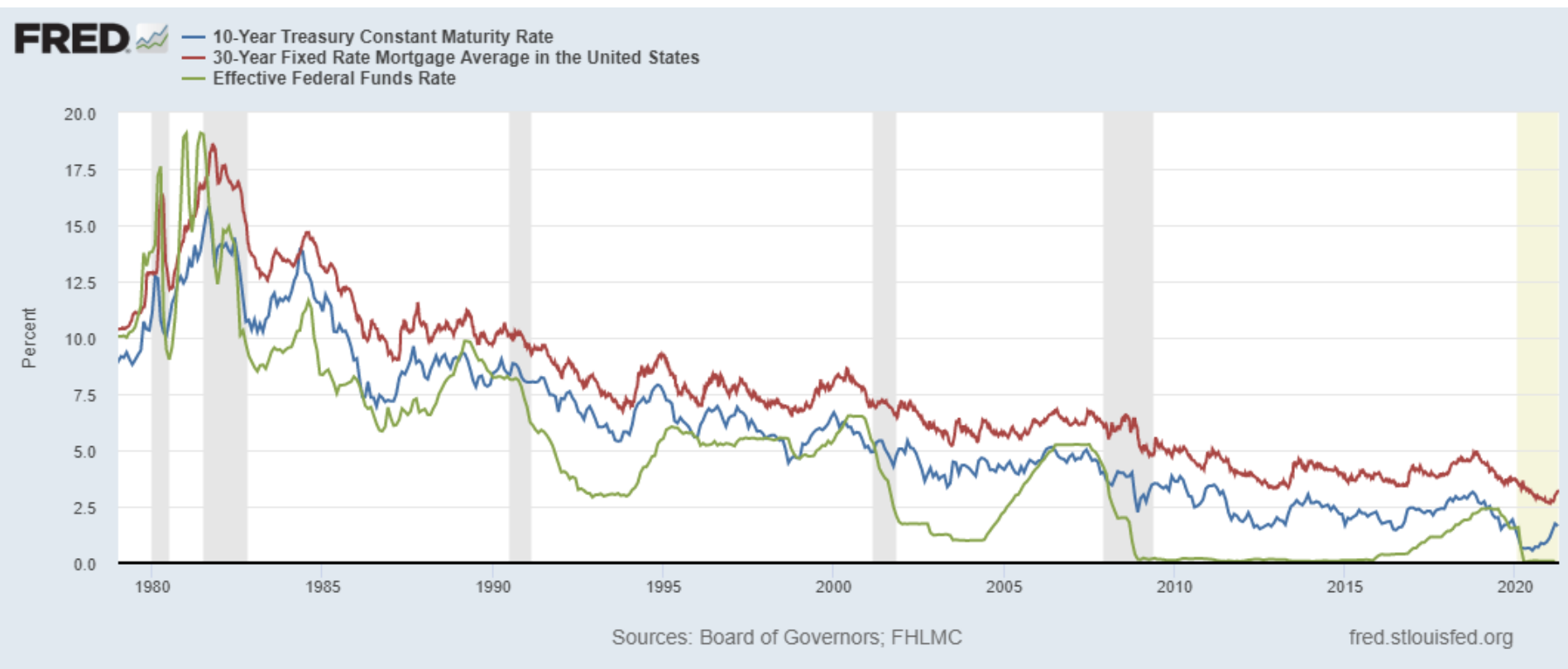
Purdue Ag Economy Barometer 5-Year



Interest Rates

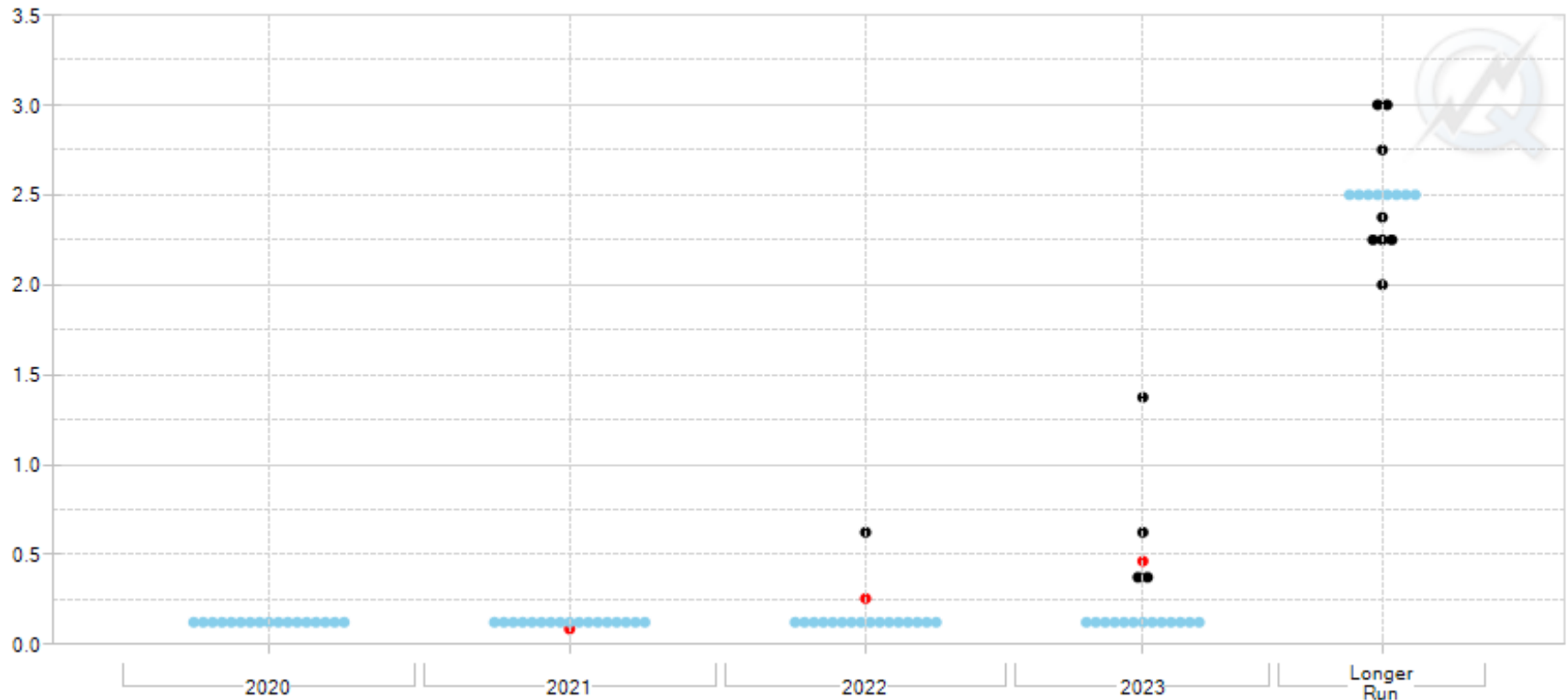
The 30 yr mortgage rate averages +150 to +170 basis points above the 10 yr T-bond

The 10 yr T-bond moves 37 points for every 100 point movement in the FFR



FOMC Projected Future FFR

FOMC Participants' Assessments of Appropriate Monetary Policy : "Dot-Plot"



Blue dots indicate the median projection. Data is based on the economic projections published on September 16, 2020.
Red dots indicate the effective rate implied by the year-end FedFund future price.

General Comments

- Crop and Pasture land in ND has still not quite reached the high water mark set over 6 years ago.
- Inflation has eroded land values further than the nominal prices
- Few farmers in recent surveys say they intend to buy more land with the improvement in net farm incomes
- Corn belt farmers bullish on farmland values
- Rising interest rates put downward pressure on land values and upward pressure on cash rents

Tracking Crop Growing Conditions

Frayne Olson

Crop Economist/ Marketing
Specialist

frayne.olson@ndsu.edu

701-231-7377 (o)

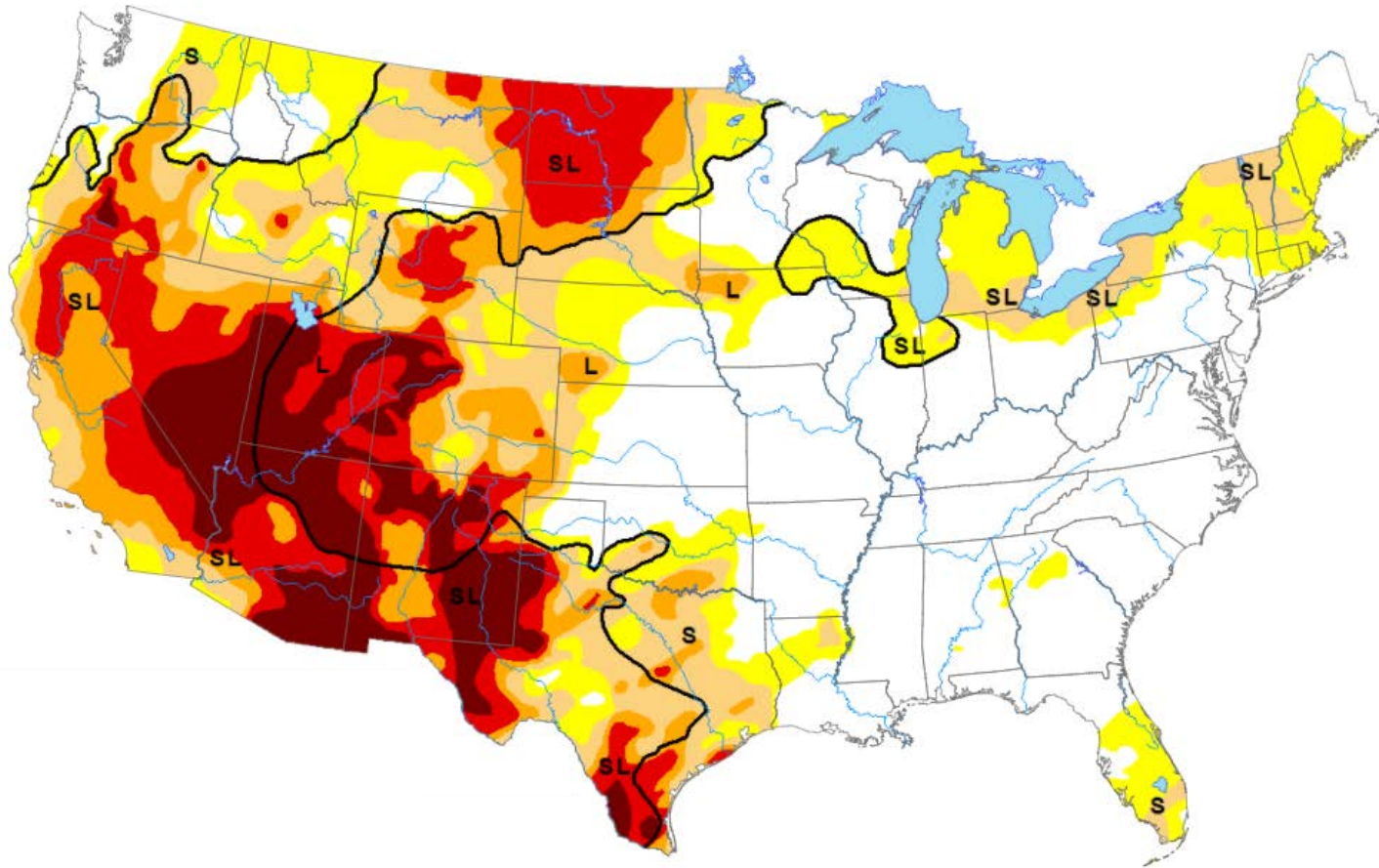
701-715-3673 (c)



U.S. Drought Monitor

Map released: April 15, 2021

Data valid: April 13, 2021



U.S. Drought Monitor

- Updated weekly and released every Thursday morning.
- Search Term – “US Drought Monitor”.
- URL - <https://droughtmonitor.unl.edu/>

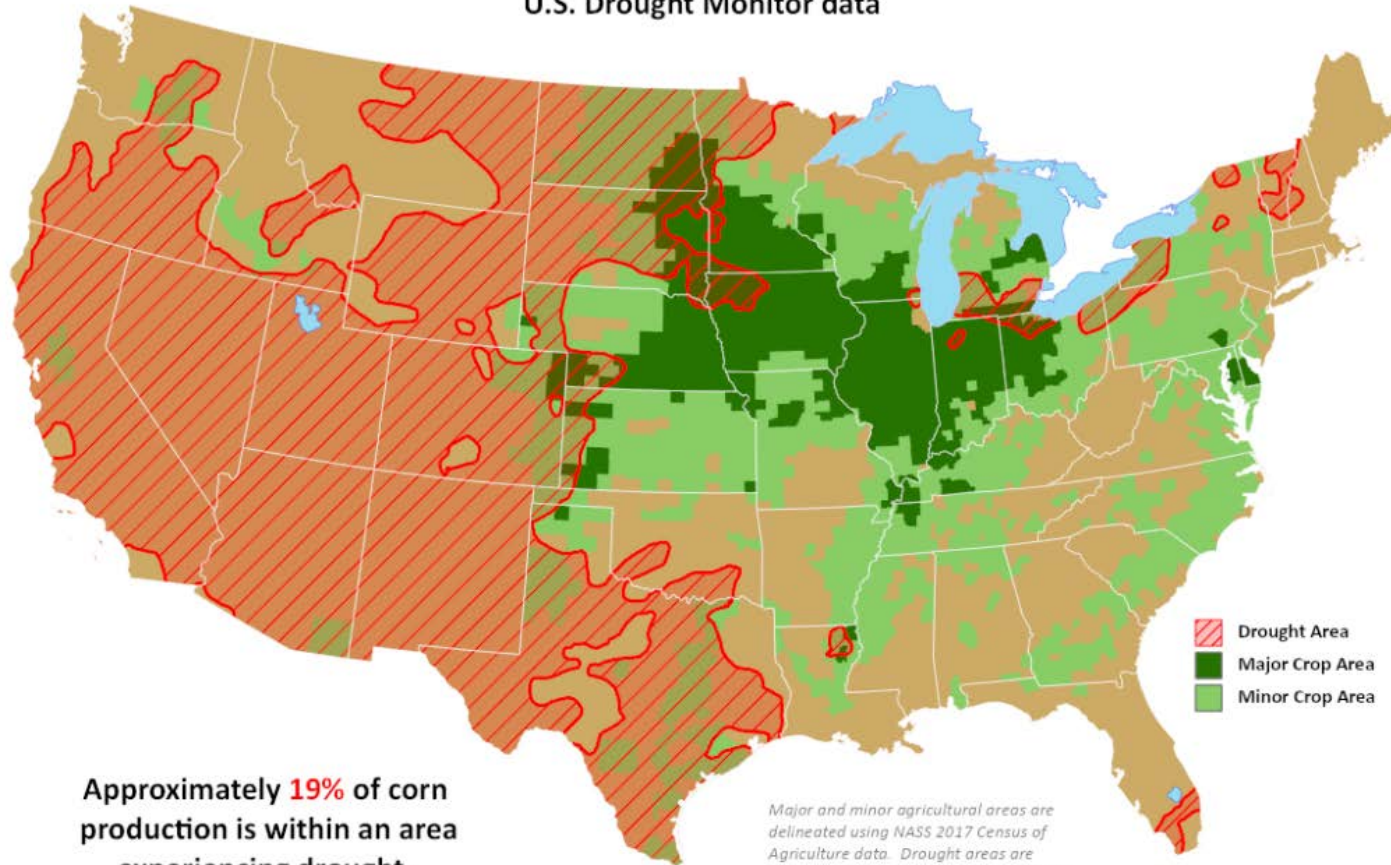
USDA – US Agriculture Drought Monitor



This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Corn Areas in Drought

Reflects **April 6, 2021**
U.S. Drought Monitor data



- Drought Area
- Major Crop Area
- Minor Crop Area

Approximately **19%** of corn production is within an area experiencing drought.

Major and minor agricultural areas are delineated using NASS 2017 Census of Agriculture data. Drought areas are identified using the U.S. Drought Monitor product.

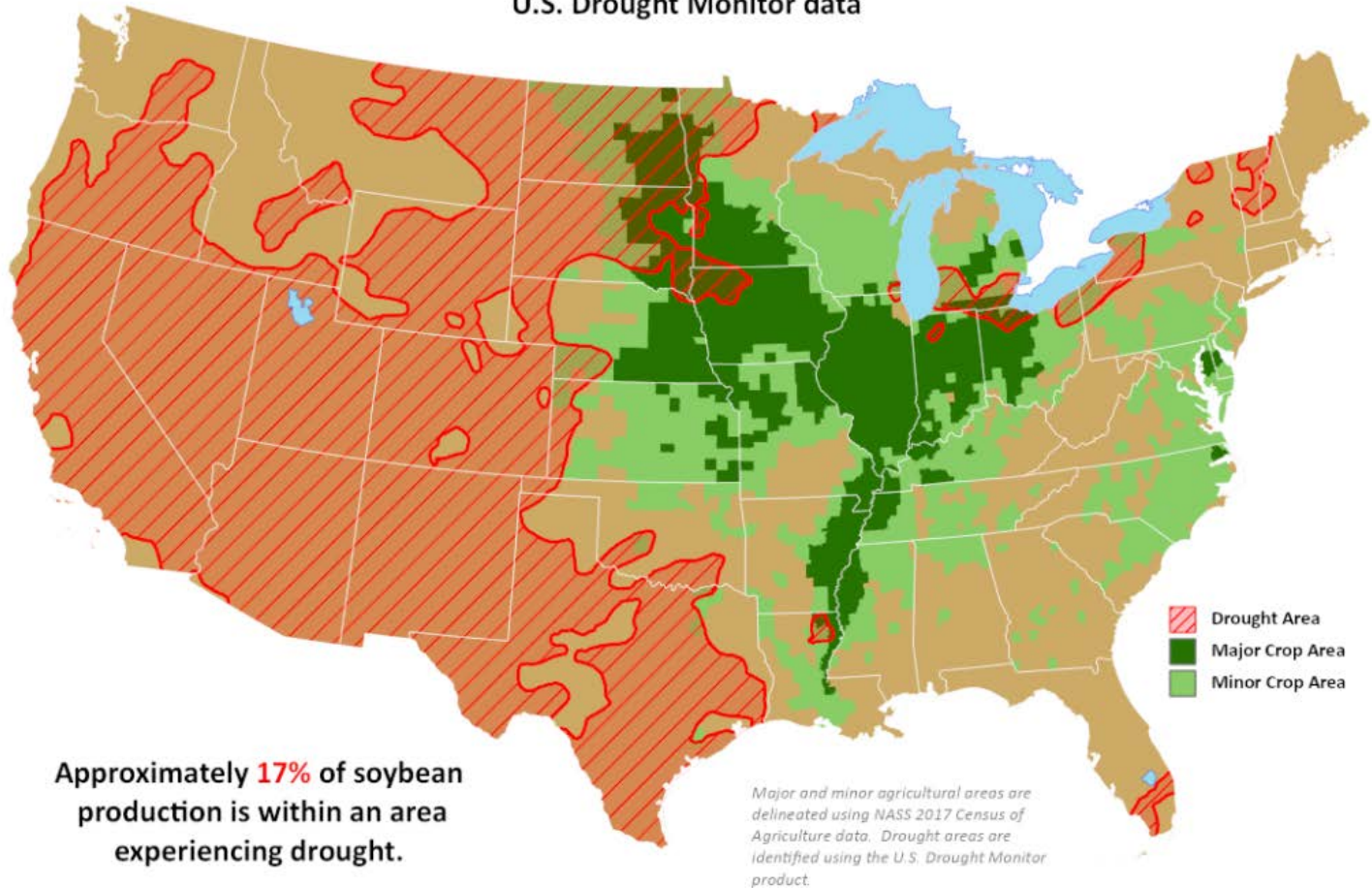
USDA – US Agriculture Drought Monitor



*This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)*

Soybean Areas in Drought

Reflects **April 6, 2021**
U.S. Drought Monitor data



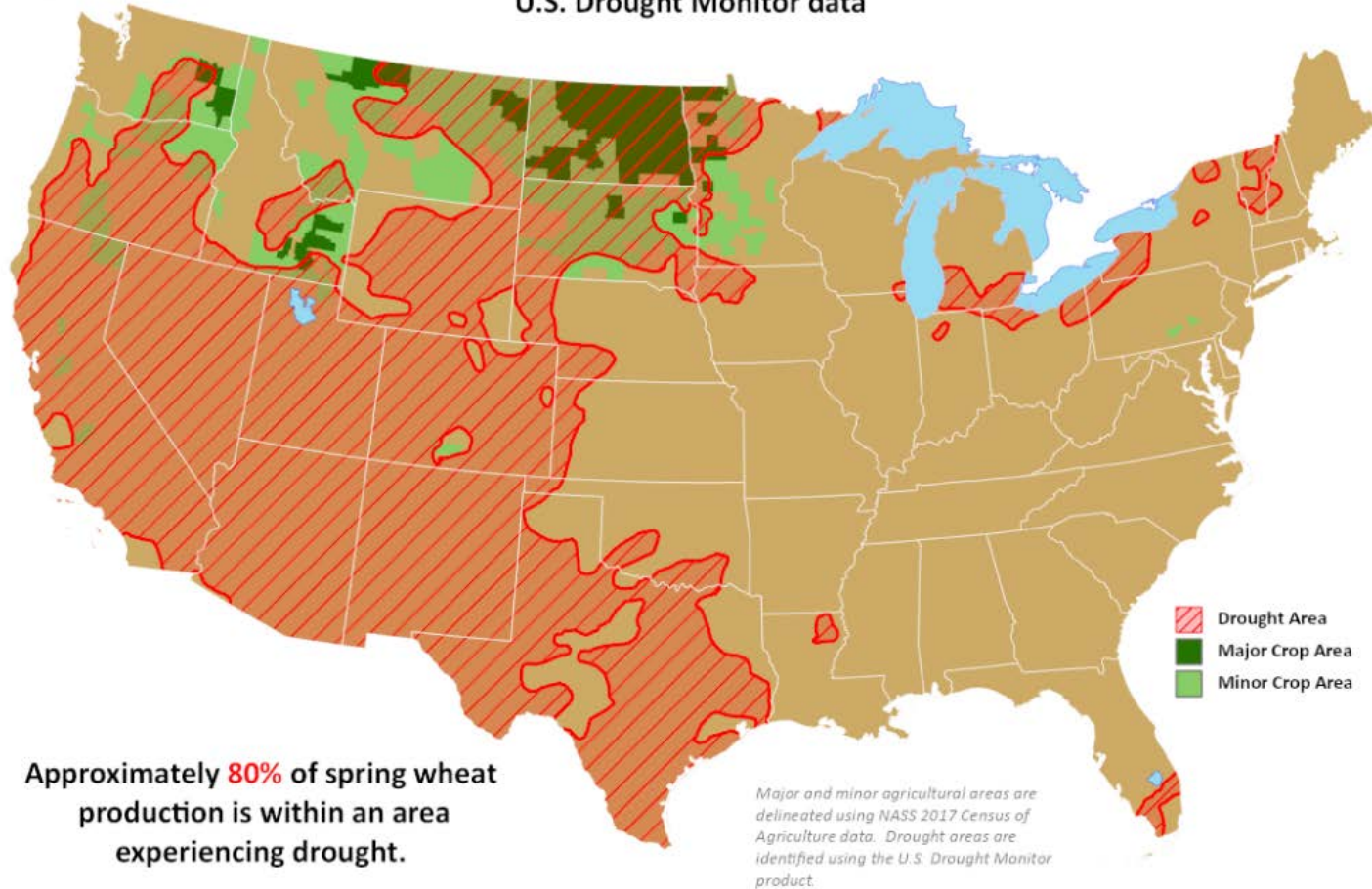
USDA – US Agriculture Drought Monitor



This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Spring Wheat Areas in Drought

Reflects **April 6, 2021**
U.S. Drought Monitor data



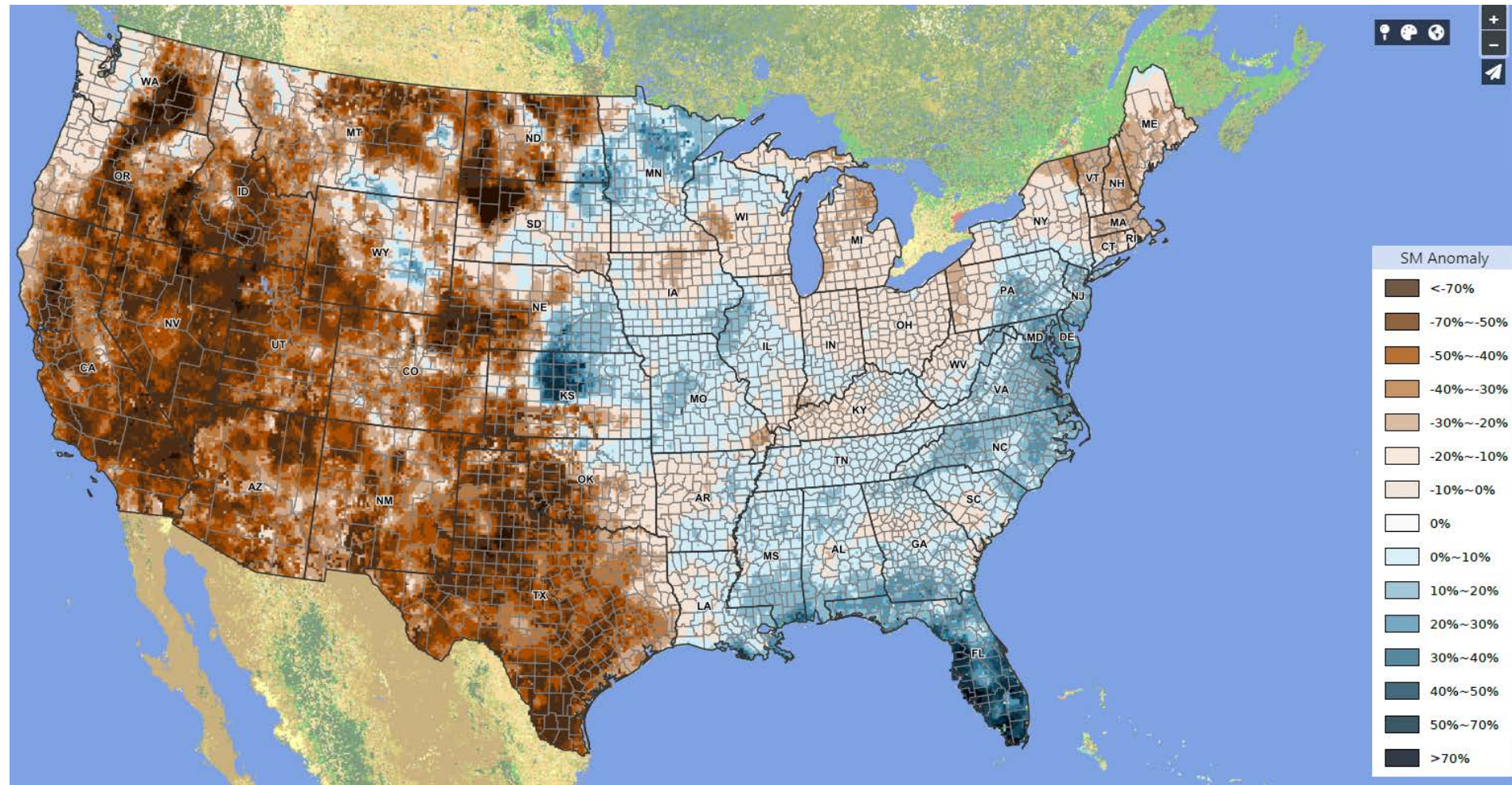
Approximately **80%** of spring wheat production is within an area experiencing drought.

Major and minor agricultural areas are delineated using NASS 2017 Census of Agriculture data. Drought areas are identified using the U.S. Drought Monitor product.

U.S. Drought Monitor

- Updated weekly and released every Thursday afternoon.
- Search Term – “USDA Agriculture in Drought”.
- URL - <https://www.usda.gov/sites/default/files/documents/AgInDrought.pdf>

USDA – Crop –CASMA Soil Moisture Anomaly

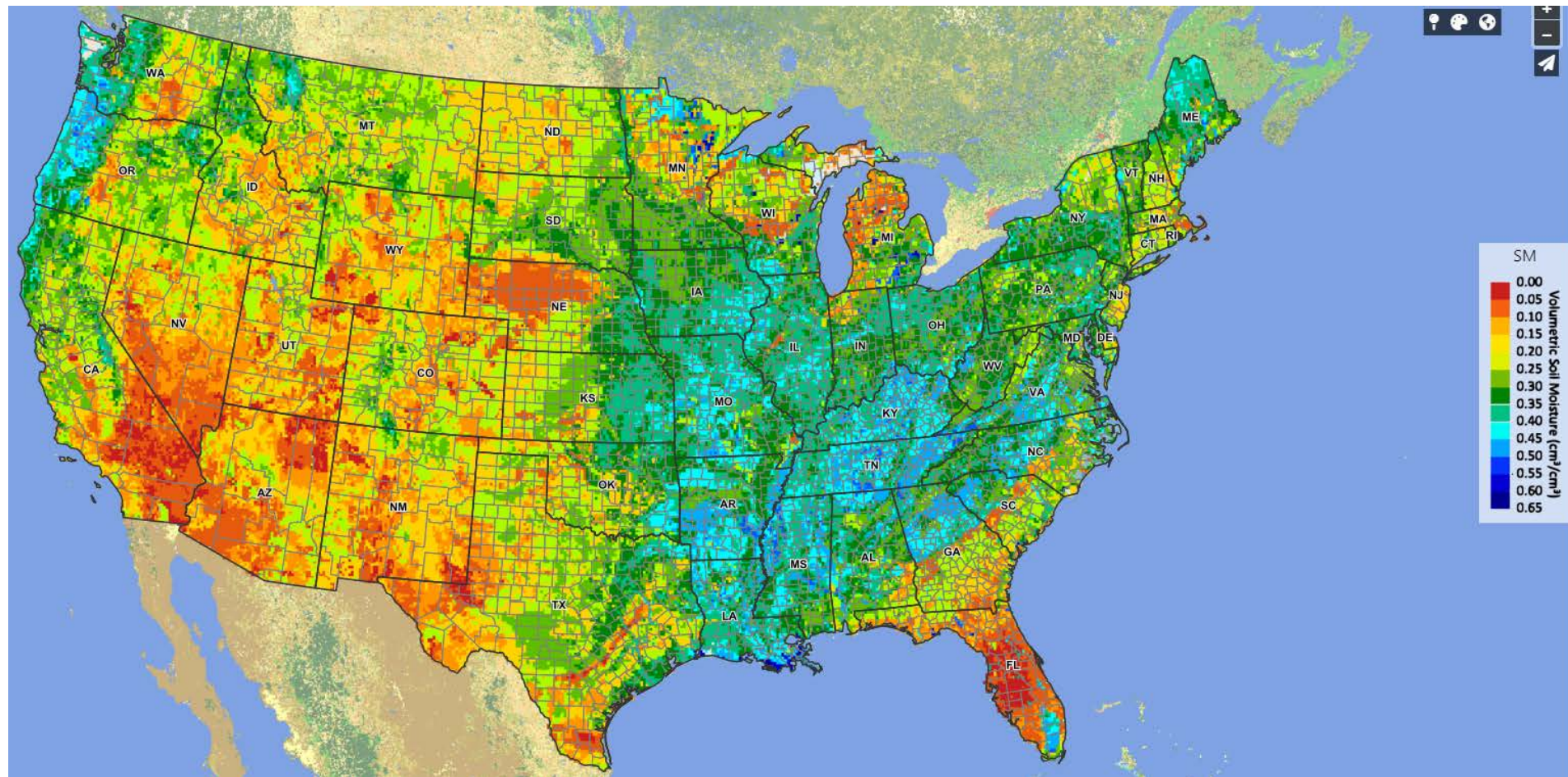


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USDA – Crop – CASMA: **Topsoil (2")** or **Subsoil (1 meter = 3.2')** – Updated Daily or Weekly

USDA – Crop –CASMA Soil Moisture

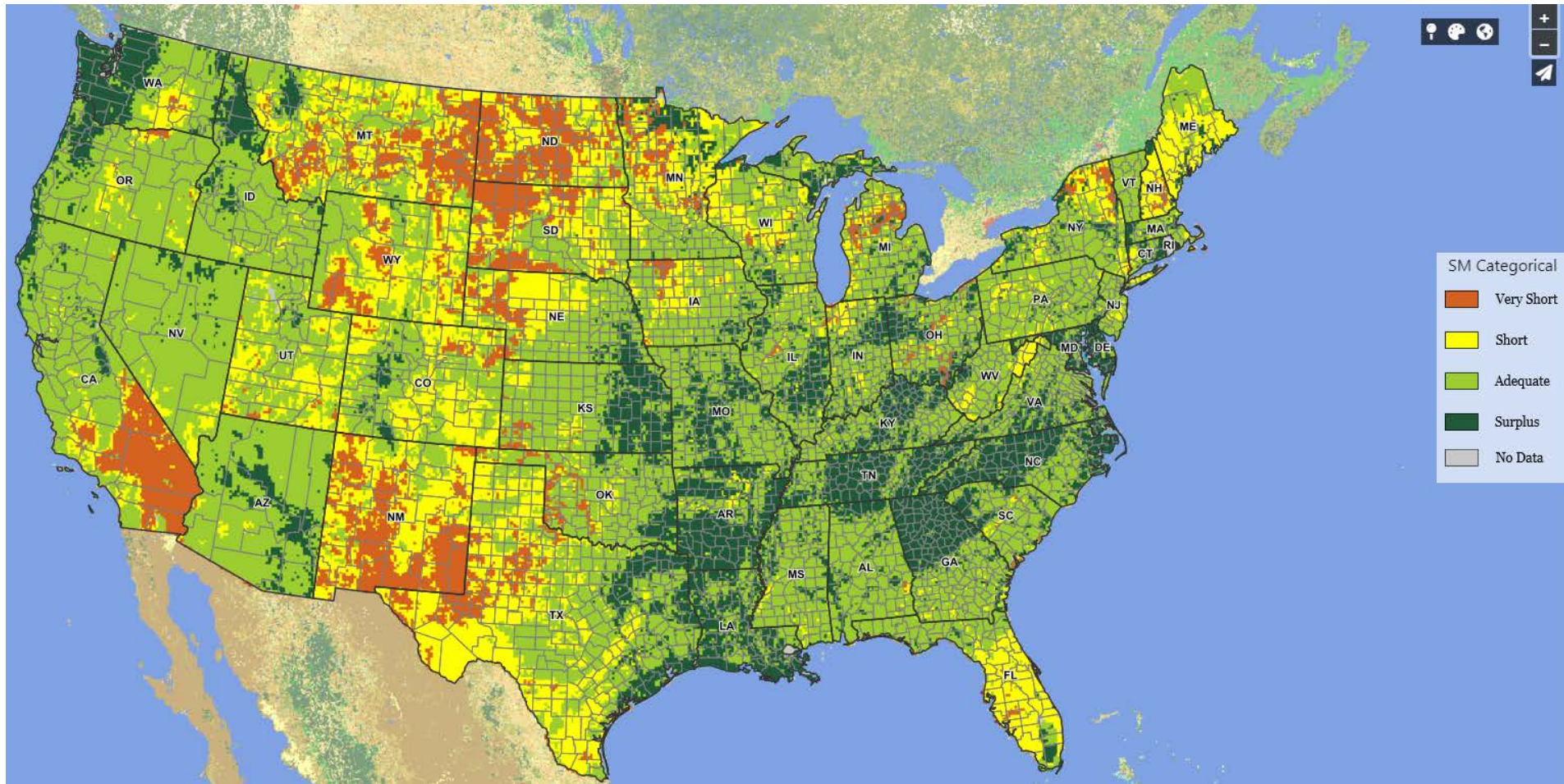


NDSU

EXTENSION AGRIBUSINESS

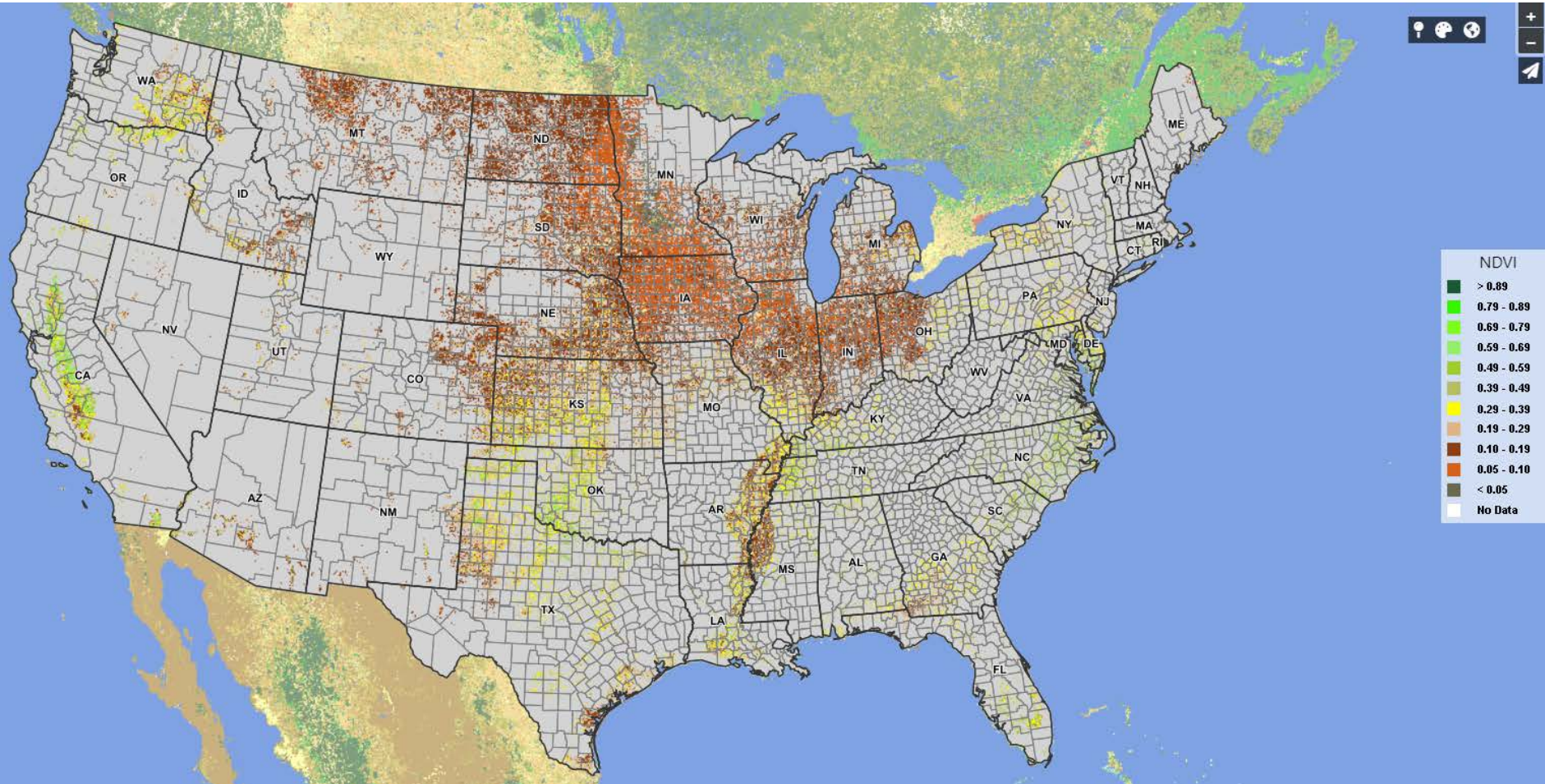
USDA – Crop – CASMA: **Topsoil (2")** or **Subsoil (1 meter = 3.2')** – Updated Daily or Weekly

USDA – Crop –CASMA Soil Moisture - Categorical



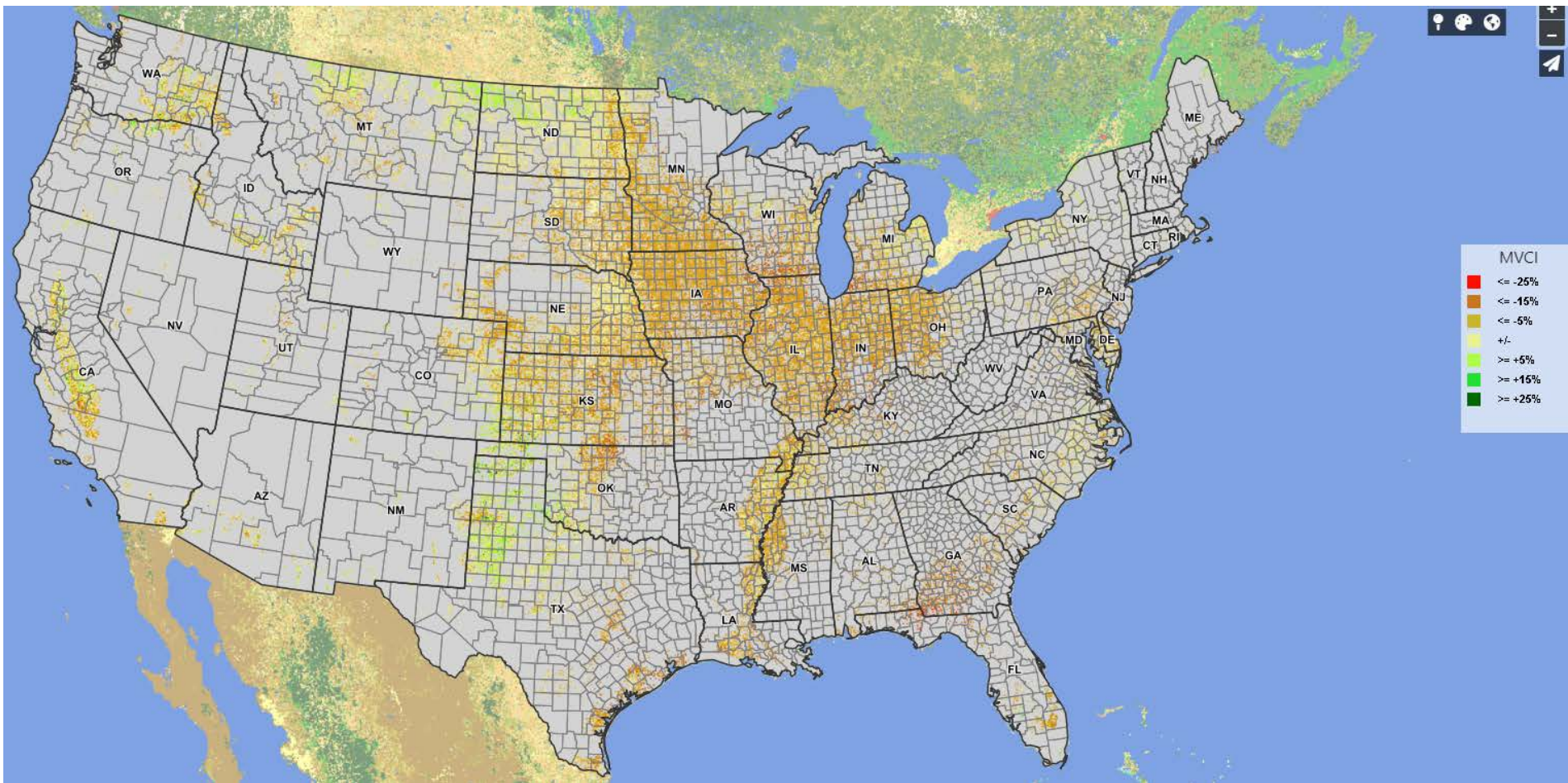
USDA – Crop –CASMA

Normalized Difference Vegetative Index (NDVI)



USDA – Crop –CASMA

Mean Vegetative Condition Index (MVCI)

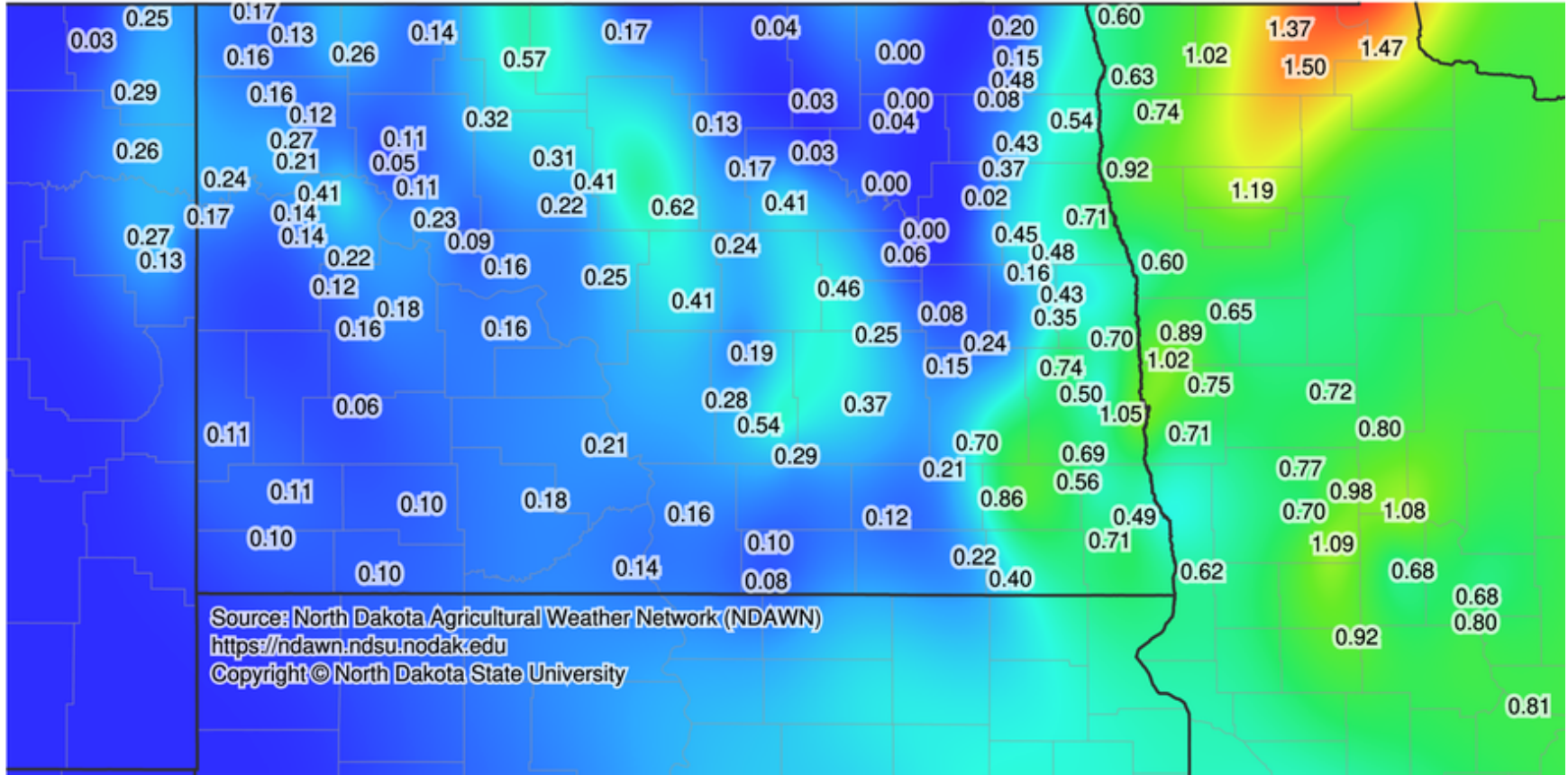


USDA – Crop - CASMA

- Updated daily or weekly (with a delay)
- Search Term – “USDA Crop CASMA”.
- URL - [https://www.nass.usda.gov/Research and Science/](https://www.nass.usda.gov/Research_and_Science/)

ND Agricultural Weather Network (NDAWN)

Total Rainfall (inch) (2021-04-08 – 2021-04-14)

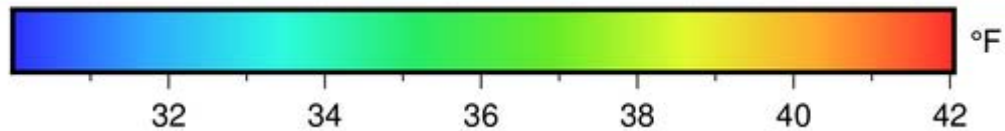
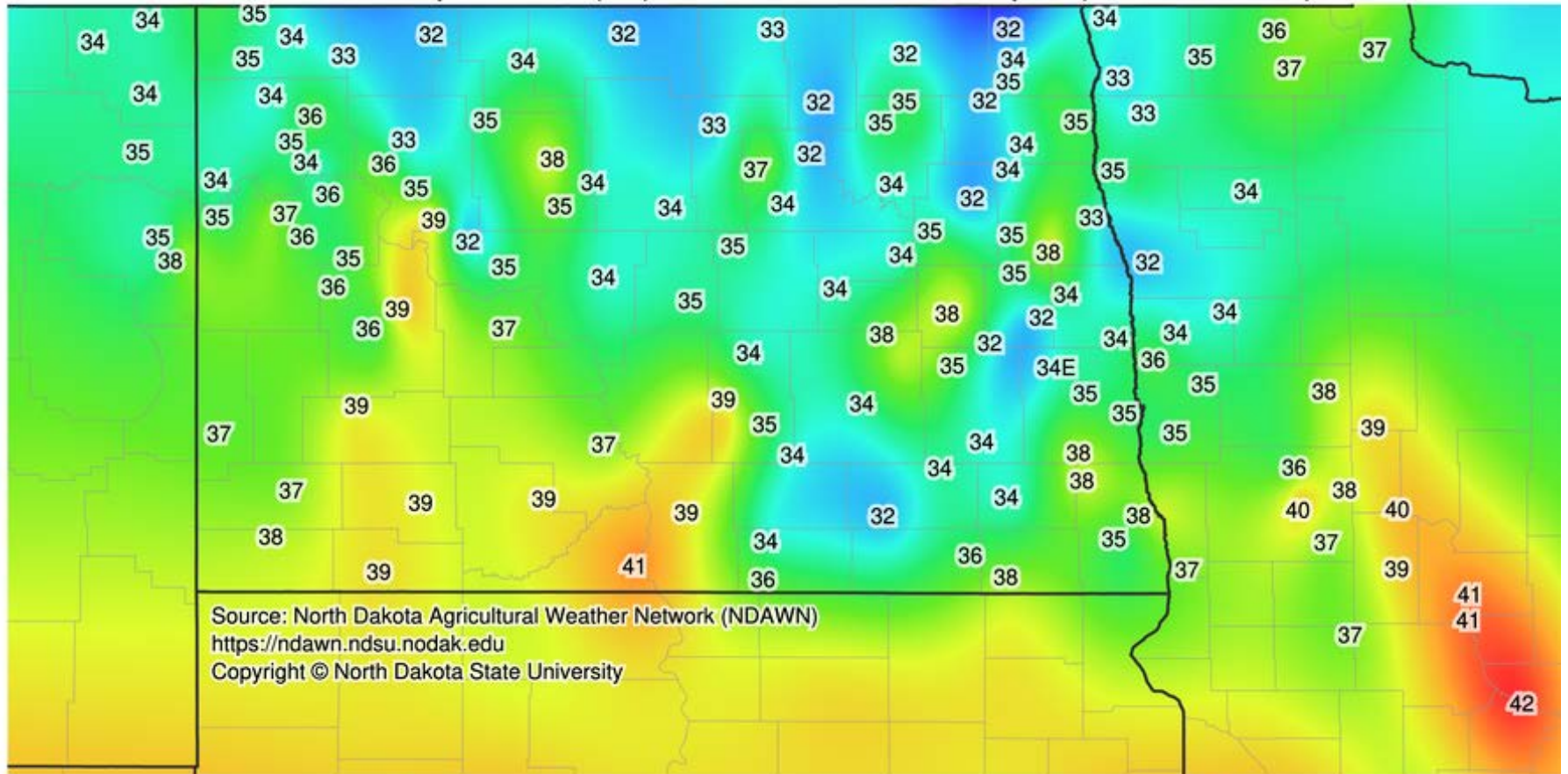


0.00 0.25 0.50 0.75 1.00 1.25 1.50

inch

ND Agricultural Weather Network (NDAWN)

Soil Temperature (°F) Under Bare at 4" Depth (2021-04-14)



ND Agricultural Weather Network (NDAWN)

- Updated hourly
- Search Term – “ND Agricultural Weather Network”.
- URL - <https://ndawn.ndsu.nodak.edu/>

LIVESTOCK PRICE SITUATION AND OUTLOOK

Tim Petry

Extension Livestock Marketing
Economist

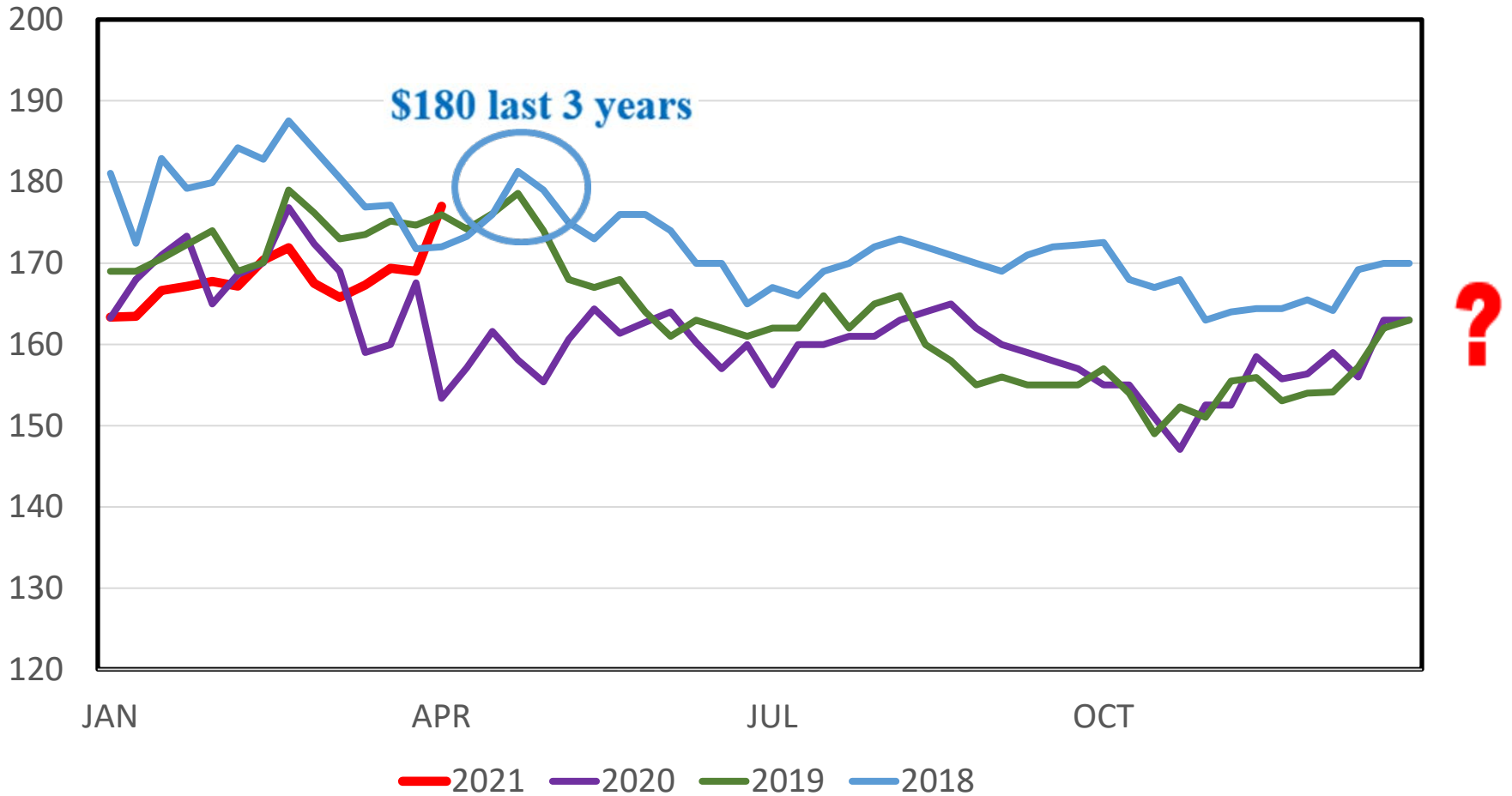
Tim.Petry@ndsu.edu

www.ndsu.edu/livestockeconomics



MED. FRAME #1 STEER CALF PRICES

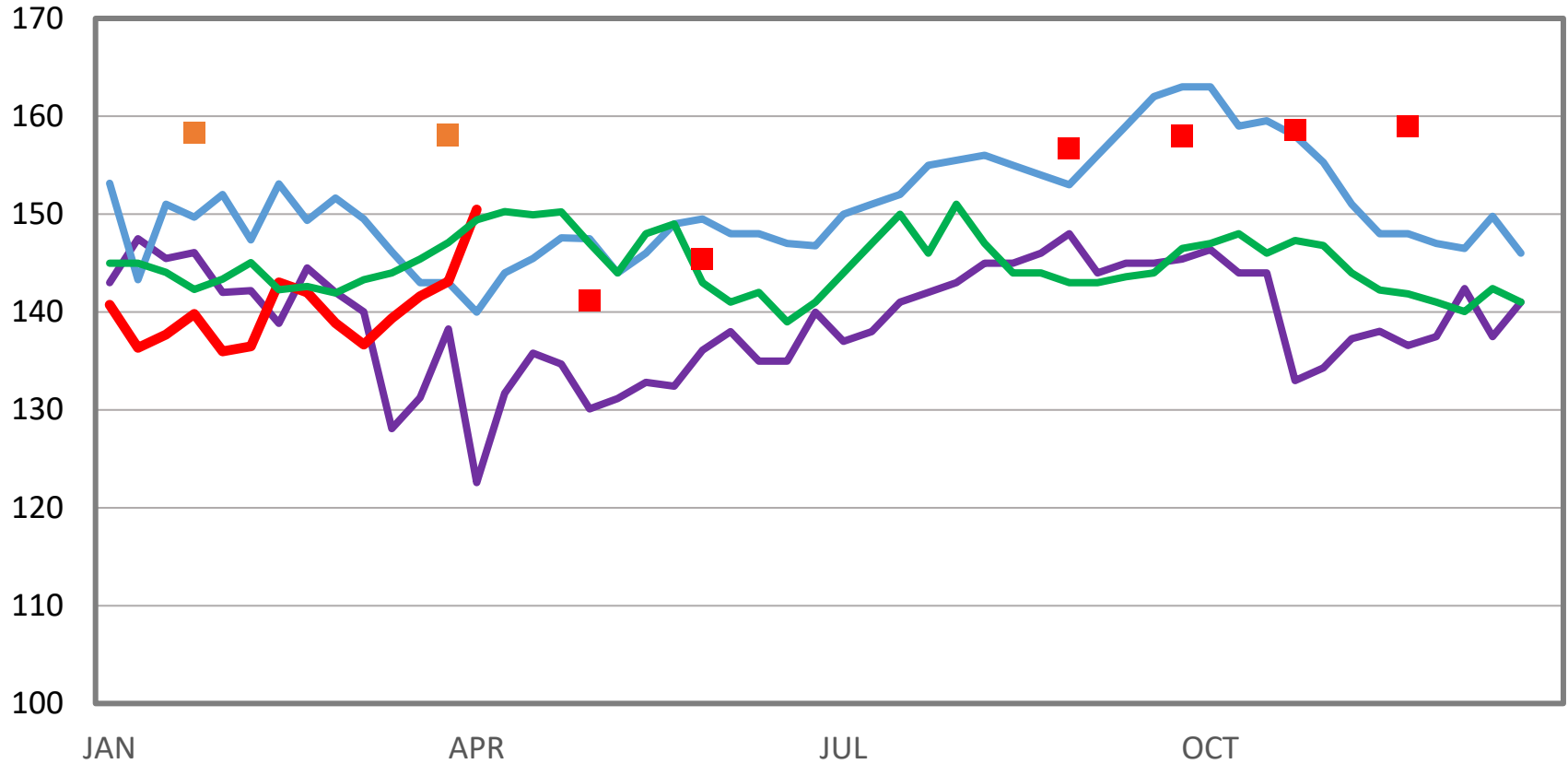
550-600 Pounds, N.D., Weekly



?

MED. & LRG. #1 FEEDER STEER PRICES

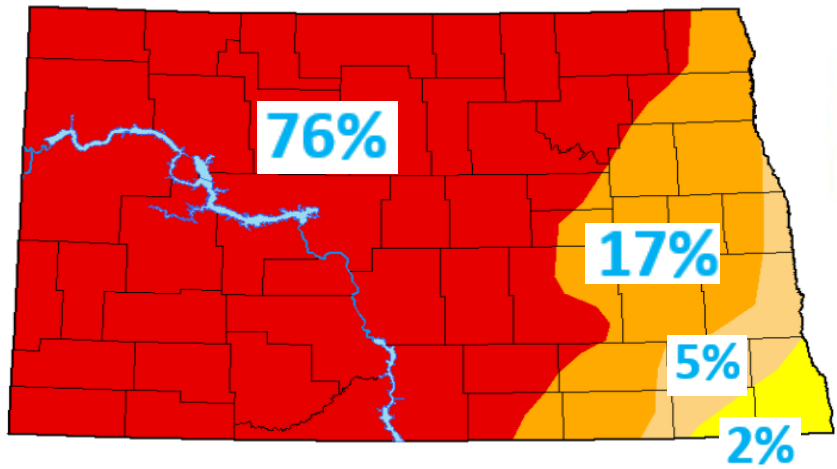
750-800 Pounds, N.D., Weekly



■ 2022 Futures
 — 2020
 — 2018
 — 2021
 — 2019
 ■ 2021 Futures

DISASTER ASSISTANCE

LFP - Livestock Forage Disaster Program



Map released: April 15, 2021

Data valid: April 13, 2021



Monthly payments for a county if the following occurs during the normal grazing period in any part of the county: **ND: Apr 15-Oct 15**

- 1 mo. D2 intensity in any area of the county for eight or more consecutive weeks
- 3 mo. D3 intensity in any area of the county for at least one week
- 4 mo. Either a D4 intensity for at least one week, or a D3 intensity for at least four weeks. The weeks do not have to be consecutive.
- 5 mo. D4 intensity for at least four weeks. The weeks do not have to be consecutive.

2020 Monthly Payments were \$18/cow
Burleigh, Morton, Oliver counties 1 payment

FSA Livestock Forage Disaster Program Eligibility Tool

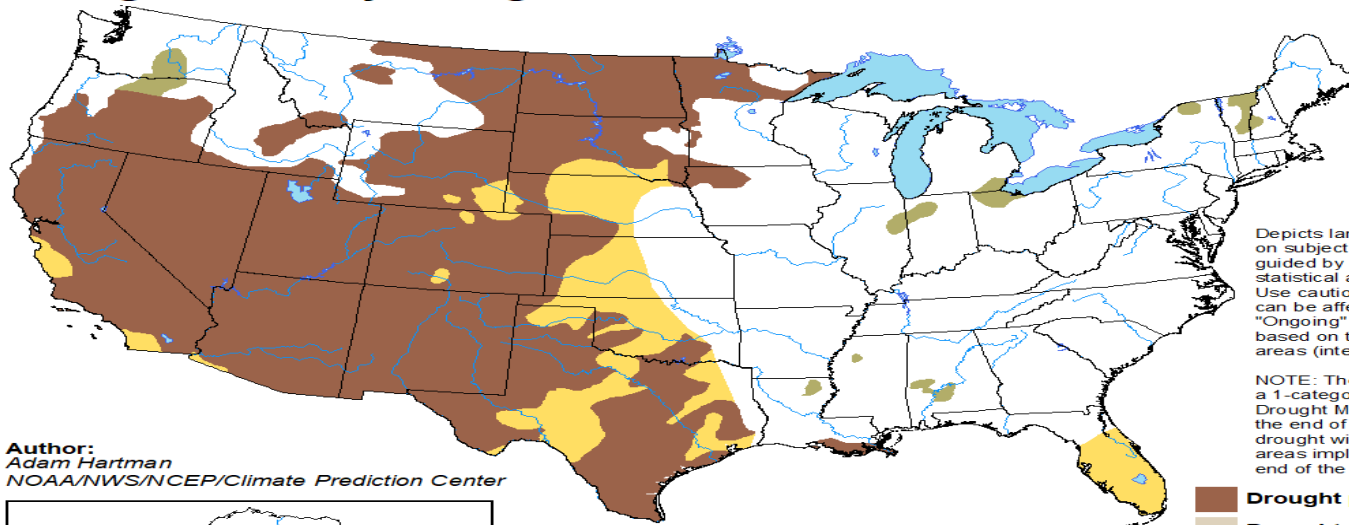
Number of counties affected: 43

State	County	
		McKenzie County
ND	Adams County	McLean County
ND	Benson County	Mercer County
ND	Billings County	Morton County
ND	Bottineau County	Mountrail County
ND	Bowman County	Nelson County
ND	Burke County	Oliver County
ND	Burleigh County	Pembina County
ND	Cavalier County	Pierce County
ND	Divide County	Ramsey County
ND	Dunn County	Renville County
ND	Eddy County	Rolette County
ND	Emmons County	Sheridan County
ND	Foster County	Sioux County
ND	Golden Valley County	Slope County
ND	Grant County	Stark County
ND	Hettinger County	Stutsman County
ND	Kidder County	Towner County
ND	LaMoure County	Walsh County
ND	Logan County	Ward County
ND	McHenry County	Wells County
ND	McIntosh County	Williams County

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

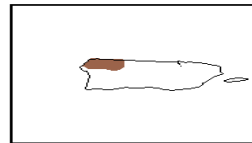
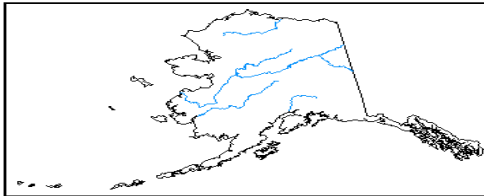
Valid for March 18 - June 30, 2021
Released March 18







Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
Adam Hartman
NOAA/NWS/NCEP/Climate Prediction Center



-  Drought persists
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



<http://go.usa.gov/3eZ73>

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Navigating Drought Webinars

Join us the last Thursdays of the month

Apr 29, 2021 01:00 PM

May 27, 2021 01:00 PM

Jun 24, 2021 01:00 PM

Jul 29, 2021 01:00 PM

Aug 26, 2021 01:00 PM

Sep 30, 2021 01:00 PM

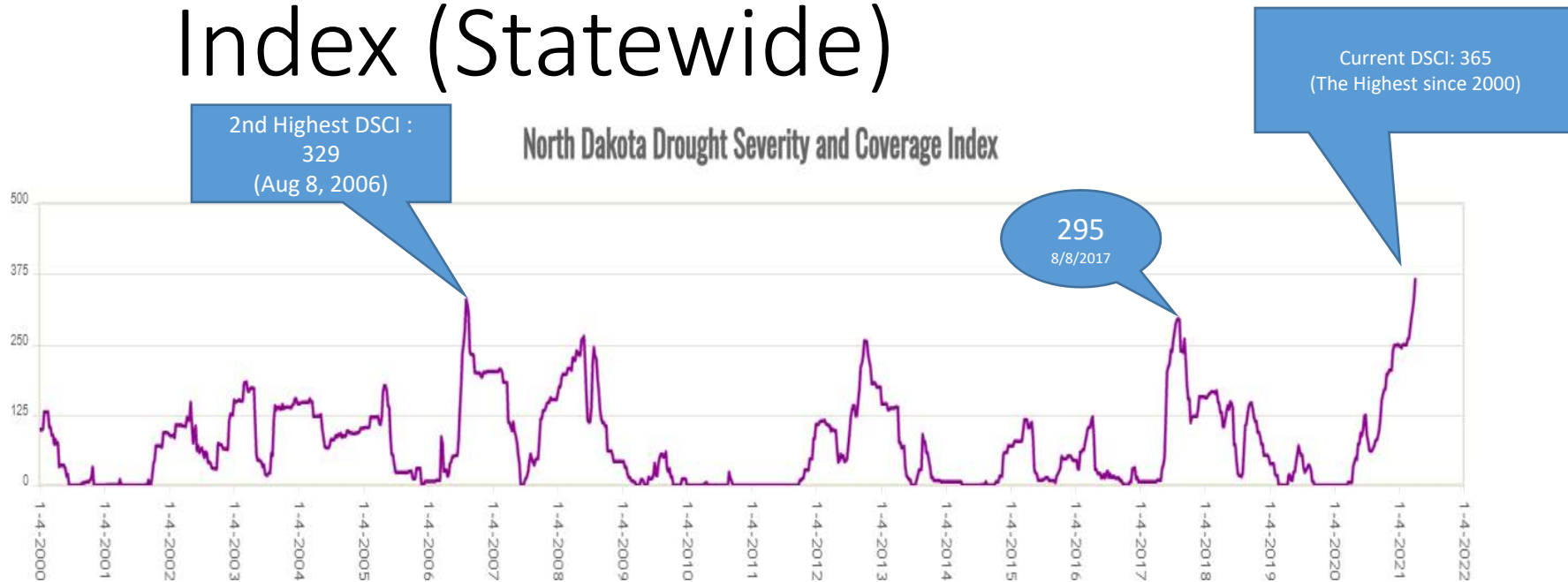
www.ag.ndsu.edu/drought

NINDSU

EXTENSION AGRIBUSINESS
EXTENDING KNOWLEDGE >> CHANGING LIVES

Adnan Akyuz, Ph.D.
NDSU, AES
State Climatologist

Drought Severity and Coverage Index (Statewide)

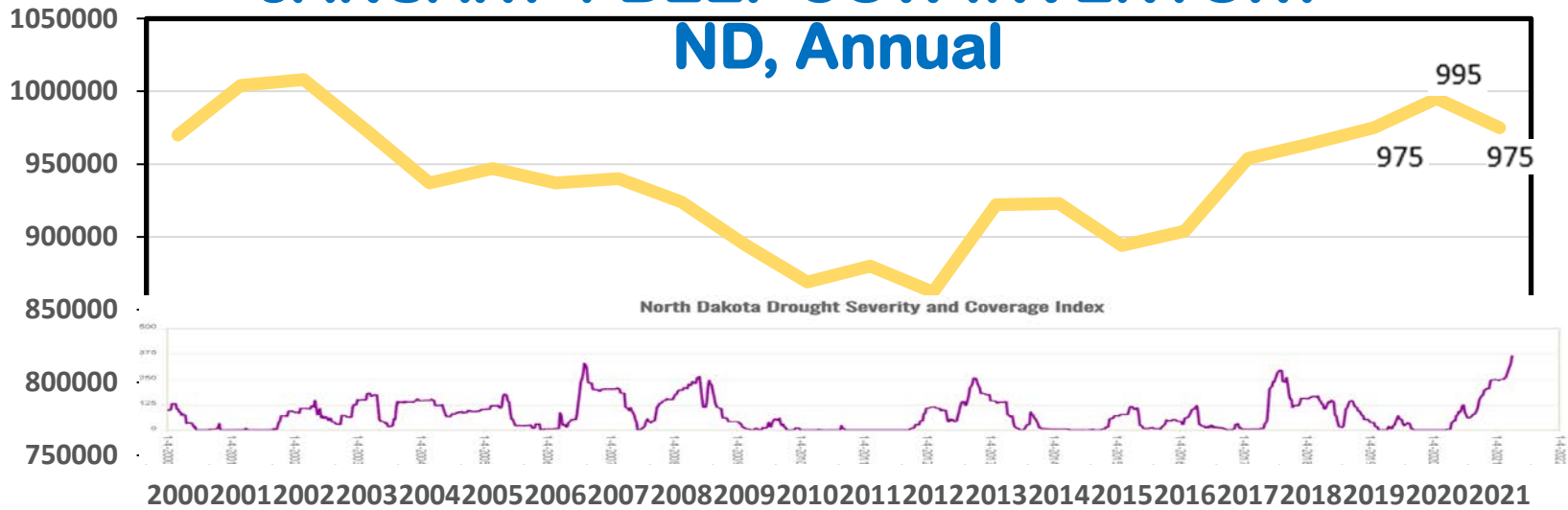


$$\text{Drought Severity and Coverage Index} = A_{D0} + 2A_{D1} + 3A_{D2} + 4A_{D3} + 5A_{D4} \quad (\text{Akyüz, 2007})$$

Where: A is a % of the state covered under the corresponding D-severity

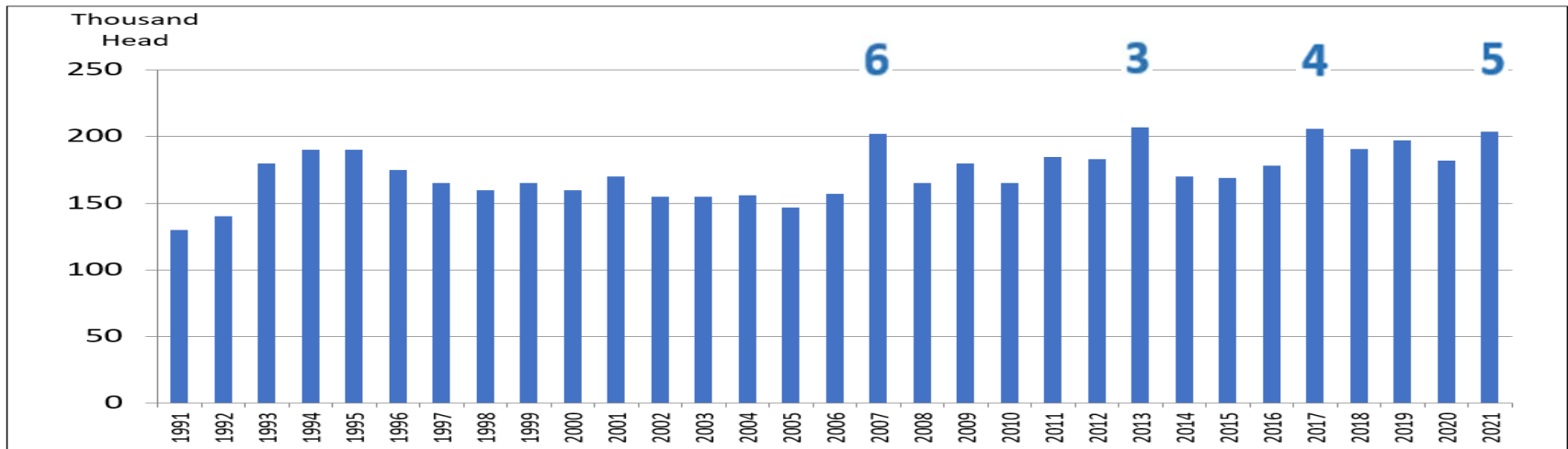
JANUARY 1 BEEF COW INVENTORY

ND, Annual



HEIFERS HELD AS BEEF COW REPLACEMENTS

January 1, ND



STOCKMEN'S LIVESTOCK EXCHANGE

Thur., Apr. 15 - East - FEEDER & REPLACEMENT HEIFER SPECIAL Over 2500 consigned with 1500 Replacement quality heifers

Plus Bred Stock: (Selling at 11am)

25 Angus pairs 2-9yrs, January born Angus Calves(16hd are 2-4yrsold)
35 Herf&Bwf 7-9yrs, bred Angus Apr. 20 50 Black cows, bred Angus
2 Dairy Hfrs, bred Angus 6 Black 5-8yrs, bred Angus



North Dakota Weekly Cattle Auction Summary
AMS Livestock, Poultry, & Grain Market News
North Dakota Dept of Ag Mrkt News

Feeder&Replacement Heifers:

Kuhn, Jeff	200	blk&bwf hfrs	750	FS
Dennis, Brein & Brad	150	blk hfrs	800	BV,FS
Schmidt, Colin	150	blk hfrs	725	BV,FS
Froehlich, Travis	100	blk hfrs	750	BV,FS
Open A Angus	100	blk&bwf hfrs	6-700	BV,FS
Fridley, Mark	70	blk str	750	FS
Schaper, Jim	70	blk hfrs	800	BV,FS
Schneider, Ty	70	blk hfrs	650	BV,FS
Steffan, Bob & Duane	70	blk hfrs	8-900	FS
Duppong, Ken	65	blk hfrs	700	BV,FS
Steffan & Fischer	65	blk&bwf hfrs	650-725	checked open,BV,FS
Nauman, Jarret	60	red&blk hfrs	750	PG open&breedable,BV,FS
Ulrich Ranch	57	blk&bwf hfrs	650	FS
Perdaems, Jim	55	blk hfrs	750	BV,FS
Jurgens, Bob	52	blk hfrs	850	BV,FS
Martin, Ron	50	red&blk	650	Natural, SS
Schroeder, Rocco	50	red angus hfrs	750	BV,FS
Norby, Don	45	red&blk	550	weaned,FS
Bloom, Jason	40	red hfrs	7-900	BV,FS
Dukart, Derek	40	red&blk hfrs	650	FS
Hauser, Mark	40	black	6-700	FS
Hewson, Myron	40	red	650	FS
Knudsig, Larry	40	blk hfrs	800	BV,FS
Perhus Bros.	40	black	650	FS
Rhode, John	40	35 blk & 5 bwf hfrs	750	BV,FS
Schettler, Joe	40	red hfrs	675	BV,FS
Fridley, Mark	35	blk hfrs	725	BV,FS
Nodland, Dave	35	blk hfrs	700	BV,FS
Teeters, Bill	35	blk hfrs	700	SS,BV
Juntnen, Tom	30	blk hfrs	700	BV,FS
Myran, Greg	30	blk&bwf hfrs	650	SS
Richard, Dave	30	blk&bwf hfrs	700	FS
Filkoski, Loren	25	blk str	650	FS
Hueske, Dustin	25	blk hfrs	775	BV,FS
Braun, Jim	20	blk hfrs	750	BV,FS
Chinn, Brad	20	blk hfrs	650	BV,FS
Filkoski, Loren	20	blk hfrs	550	FS
Ottmar, Dion	20	blk hfrs	700	FS
Pojorlie, Gene	20	blk hfrs	550	FS
Wanner, Adam	20	blk hfrs	775	BV,FS
Kautzman, Tanner	18	blk hfrs	650	BV,FS
Erickson, Chris	15	blk hfrs	900	BV,FS
Sadowsky, Al	15	blk hfrs	750	BV,FS
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HEIFERS - Medium and Large 1 (Per Cwt / Actual Wt)

Head	Wt Range	Avg Wt	Price Range	Avg Price	
10	360-382	380	175.00-184.00	183.15	
32	401-436	414	164.00-174.00	166.10	
137	463-494	480	155.00-170.00	165.36	
202	516-549	540	150.00-167.75	162.35	
365	551-598	575	143.00-165.10	156.87	
412	603-643	617	138.25-153.50	149.82	
486	652-699	672	133.00-148.00	142.98	
16	687	687	139.00	139.00	Replacement
373	700-748	727	129.50-141.00	137.10	
126	705-744	716	136.50-143.00	141.08	Replacement
270	754-799	770	123.00-134.75	130.99	
92	760-791	782	134.75-144.50	137.43	Replacement
278	800-848	830	119.00-132.25	128.88	
71	804-842	825	128.75-133.00	130.56	Replacement
268	853-886	876	119.00-128.75	128.06	
10	934	934	121.50	121.50	
8	945	945	119.50	119.50	Replacement
7	957	957	118.00	118.00	

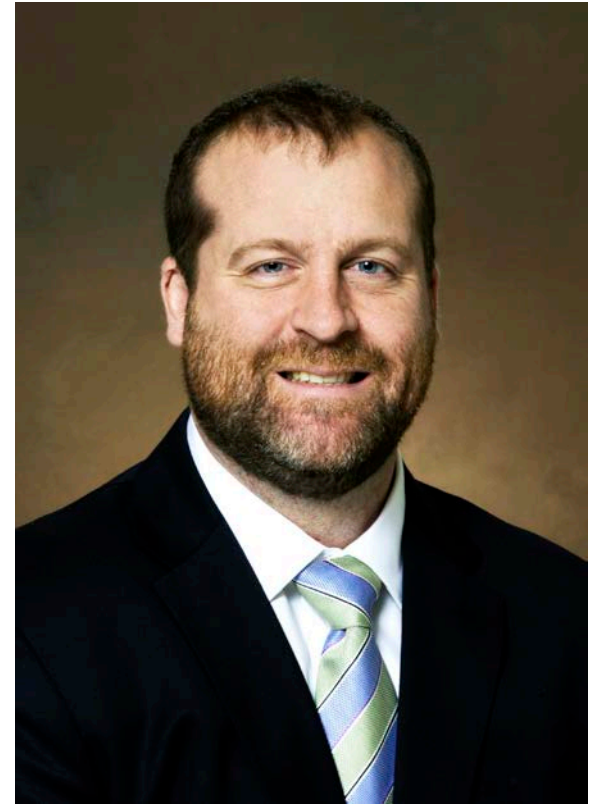
Corn-ethanol Outlook

David Ripplinger

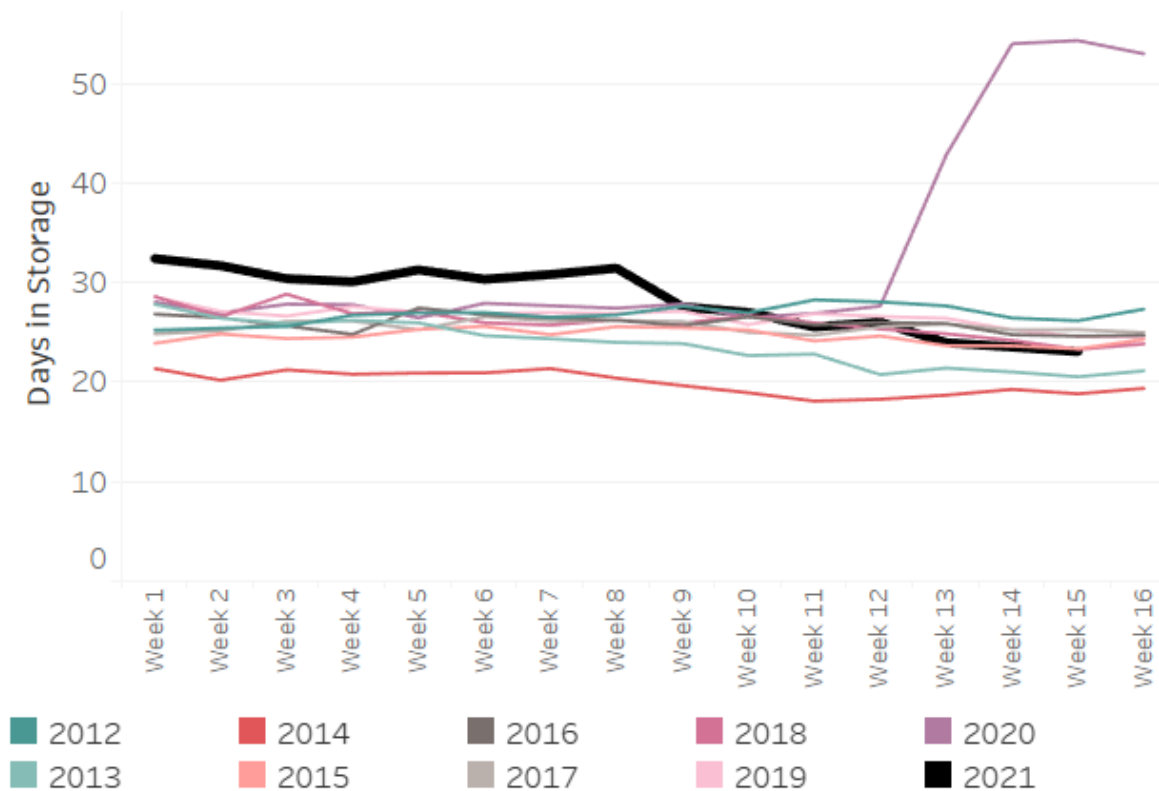
Bioproducts/Bioenergy
Economics Specialist

701-231-5265

david.ripplinger@ndsu.edu



US Corn Ethanol Days in Storage, 2012-2021, Weeks 1 to 18



Data: Energy Information Administration

Stocks continue to decline as production is not keeping up with use

Ethanol Prices

2013- \$2.48

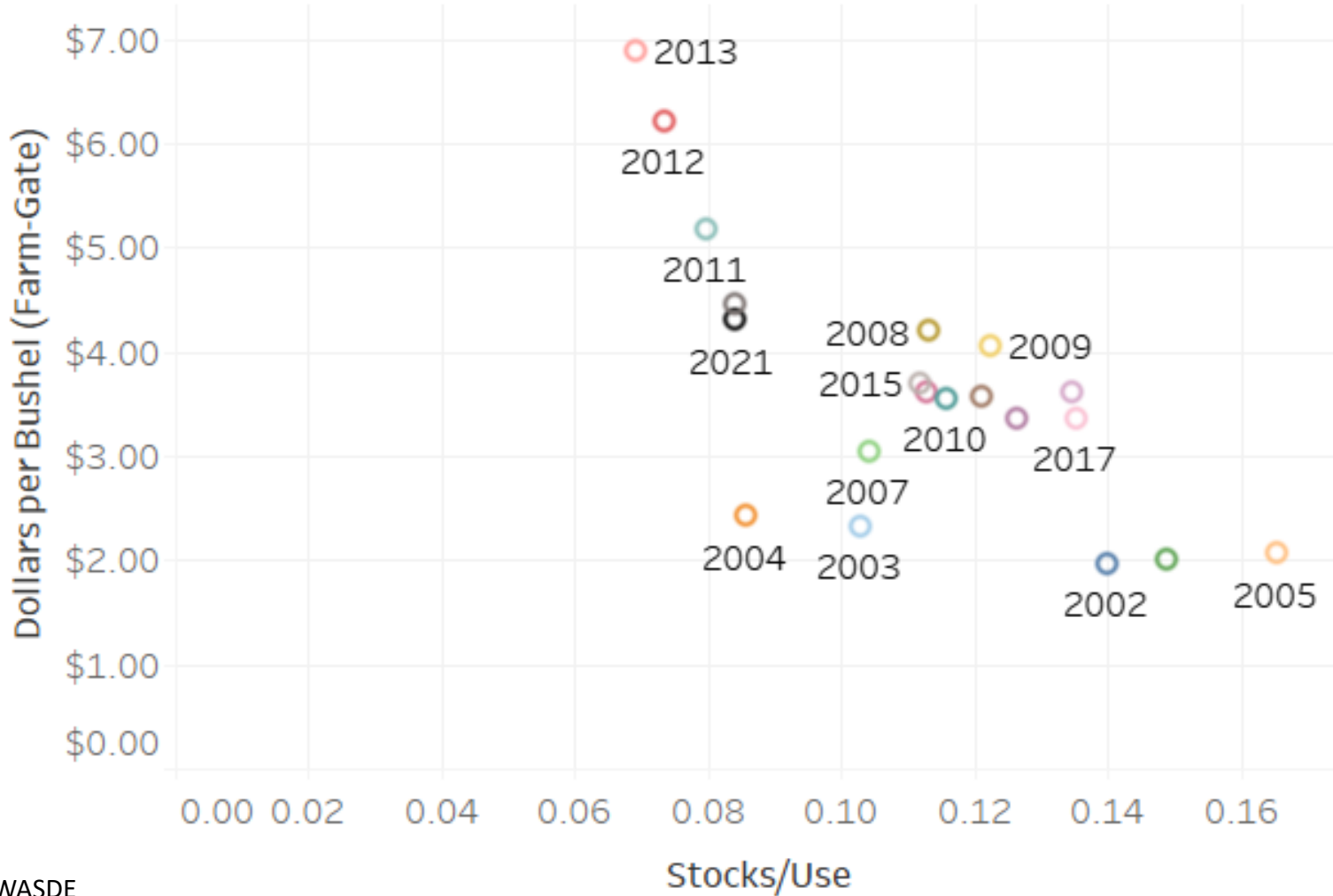
2014- \$2.79

2021 - \$1.73

Corn prices are high

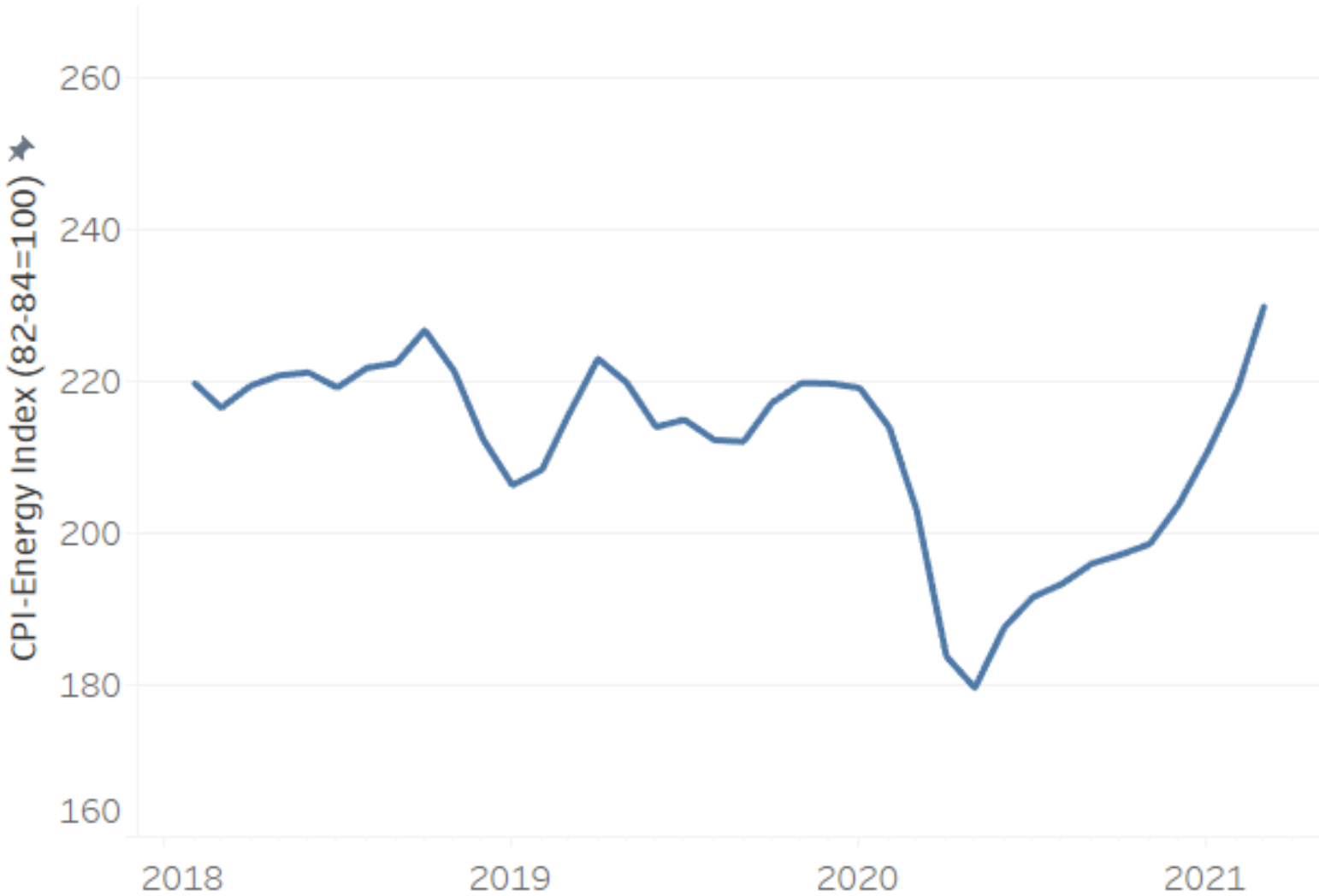
Ethanol use continues to increase

US Corn Price, Stocks-Use Ratio (2002-2021)



Data: USDA/ WASDE

US CPI-Energy Index, 2018-March 2021



US CPI-Energy Index, 2012-March 2021



Data: BLS

Please use the Q&A tool
to ask questions

The next webinar is scheduled for 1 pm CT
Thursday, May 13th

For the slides and recording of this webinar please
visit ag.ndsu.edu/farmmanagement/outlook

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