

# MARCH 2023 NEWSLETTER



## GREETINGS FRIENDS & LANDOWNERS

We are excited to report that 2023 has started with above-normal precipitation in Western Kansas, especially after experiencing the driest year in over 100 years of recorded history. Through February, we have received an average of 1.38" across the farm, compared to normal precipitation of 1.10". While precious little wheat has emerged, and the ends of most fields are scarred from chisel operations utilized to prevent wind erosion, we are optimistic the recent moisture will germinate the wheat seed that has laid dormant in the dry soil since last fall.



## SUCCESS IS DETERMINED IN THE OFF SEASON

Our team has stayed busy this winter processing and spreading manure, helping local feedyards with snow removal, hauling grain and fertilizer, and rebuilding equipment in the shop. John Deere has been falling short of meeting customer demand for new equipment, particularly with planters, so it's been great to see our team take the initiative to rebuild the equipment we already have. We are poised and ready for a successful 2023 planting season!



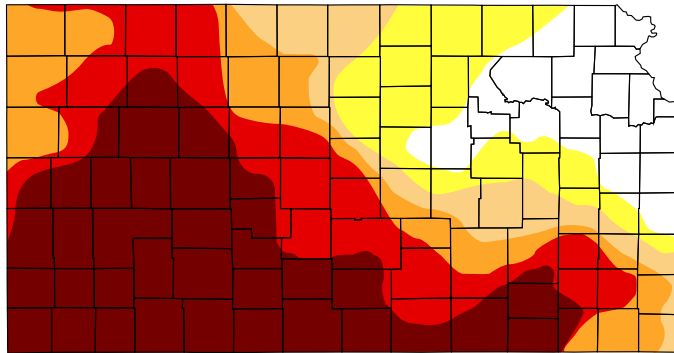
## OPPORTUNITIES AND CHALLENGES FOR 2023

Commodity prices remain strong going into 2023, and we are seeing input prices, like fertilizer and herbicide, fall precipitously. While these factors are a welcome relief to crop budgets, rising interest rates are creating strong headwinds. By staying informed and proactive, we believe landowners and farmers can position themselves for success in 2023.

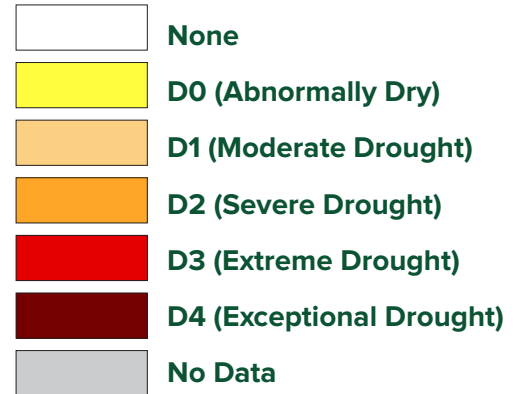


## THE DROUGHT CONTINUES

Despite recent rains, our entire farm is still classified as being in a D4 exceptional drought going into March. There is no moisture in the soil profile to sustain plant growth. This means it will take a significantly wet spring and summer to catch up on moisture just to achieve average crop yields. More likely, we are looking at another year of sub-par production, which makes the utilization of crop insurance more critical. We are lucky to have a great risk management team at VFF!



### INTENSITY



## ONE FOR THE RECORD BOOKS

It's important to document and acknowledge the severity of the 2022 drought in Western Kansas for future reference. Scott City officially recorded 8.01 inches for 2022 compared to their previous driest year on record of 10.15 inches. Garden City was even worse, recording 5.03 inches for 2022, with a previous record of 8.86 inches. This compares to normal precipitation at each location of 20.18 and 18.95 inches, respectively.

The record-breaking dryness and heat highlight the scale of the challenge faced by farmers and the local ecosystem. The ability for farmers in Western Kansas to weather the drought without recreating an environment reminiscent of pictures from the dirty 30s is a testament to the technological advancements and innovative farming practices that have been developed over generations of Western Kansas farmers.

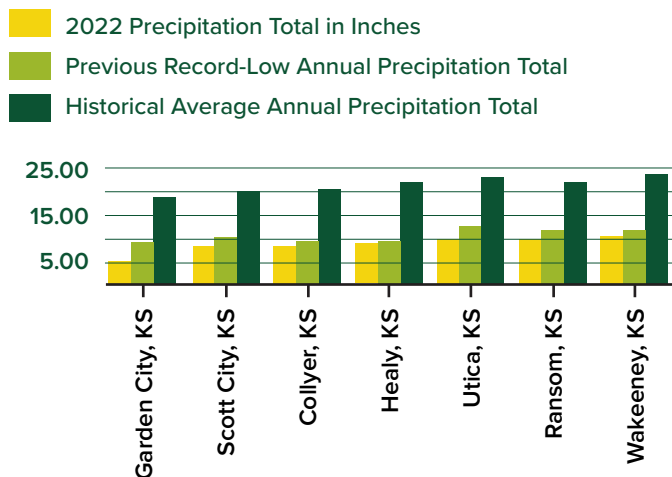


Chart: David Condos, Kansas News Service | Source: NOAA

We are thankful that our grandfather's generation figured out how to preserve soil moisture through summer fallowing the land, and that our father's generation took it a step further by focusing on residue management and implementing no-till farming practices. Credit should also be given to those in academia, government, and private industry that developed a crop insurance system that has protected farmers and landowners from severe financial hardship during tough years of drought.

The resiliency of those who came before us is not lost on the VFF team. We are proud of our heritage and excited for the opportunity to further advance production agriculture in challenging environments like Western Kansas.

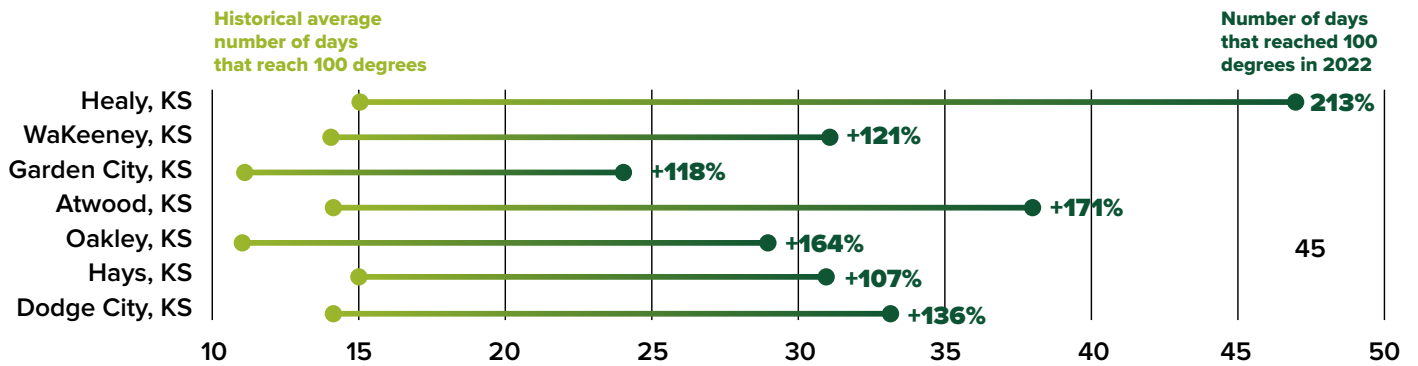
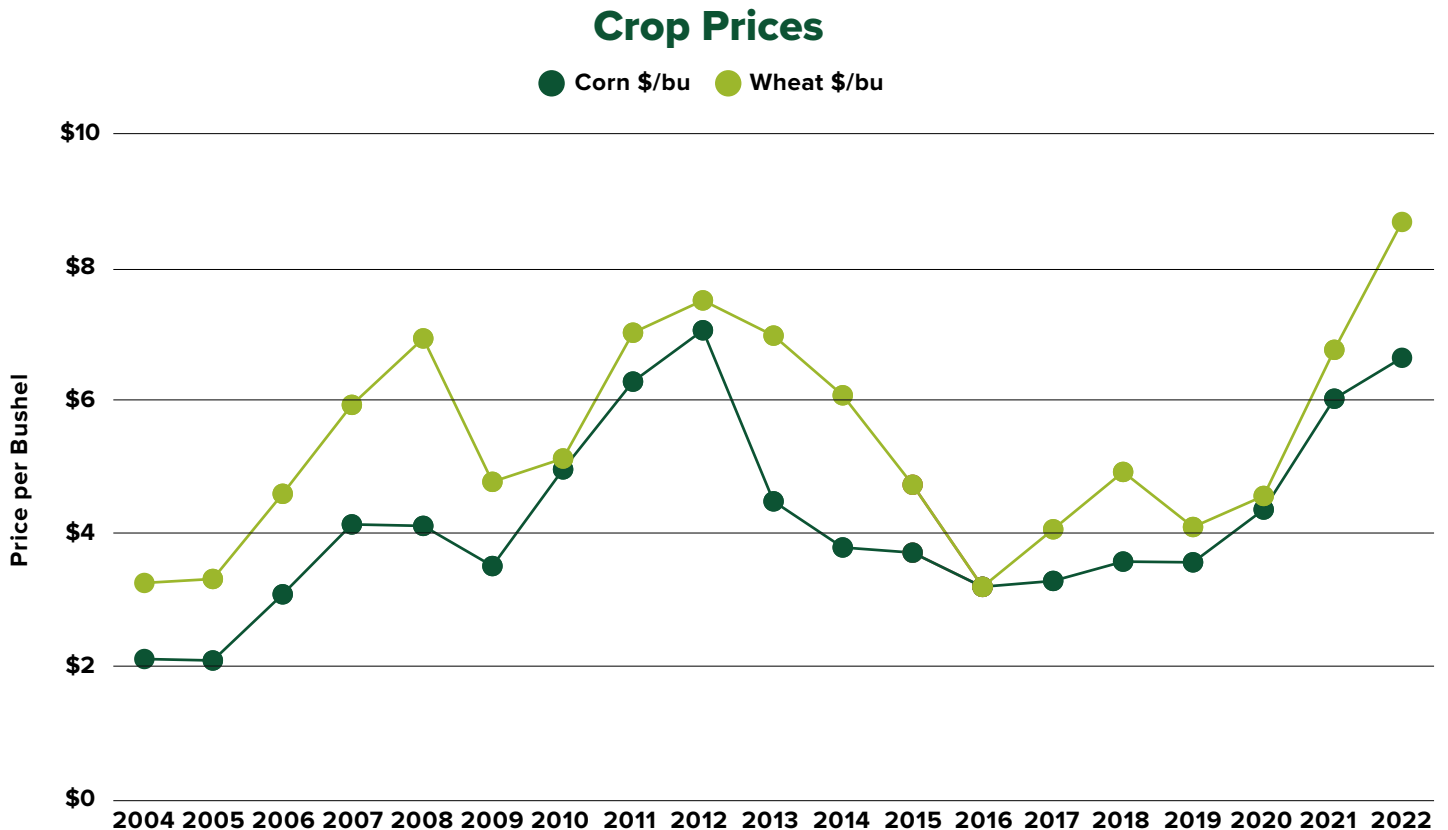


Chart: David Condos, Kansas News Service | Source: NOAA ACIS

## HISTORICALLY HIGH CROP PRICES VERSUS THE DROUGHT

Crop prices play a significant role in determining crop insurance guarantees, which are critical for protecting farmers' profitability during adverse weather conditions. Historically high commodity prices in 2021 and 2022 helped ensure farmer's profitability and preserved Western Kansas land values.



## LAND VALUES FACE HEADWINDS WITH RISING INTEREST RATES

The relationship between interest rates and agricultural land values is complex and can be influenced by a variety of factors, but farmers tend to take a straight-forward approach. They look at how much the total cost of interest will add to the cost of the land. For example, an increase of 2% on interest rates increases the interest paid over 20 years by roughly \$455/acre on land valued at \$2,000/acre.

For comparison purposes, the VFF data team took a closer look at the relationship between Kansas land values and interest rates from 2004 through 2022. Using a log-log regression model, we estimate that interest rates explain approximately 58% of the variability in land values. Further, the model suggests a positive one percent change in interest rates will result in a negative 0.39 percent change in Kansas land values. For 2023, this would imply that interest rates will be creating headwinds to the tune of approximately \$447/acre, similar to the farmer’s napkin math.

While interest rates are just one factor in determining land values, it is important to understand how the interest rate winds have recently switched directions. The Fed’s rate hikes didn’t start impacting farmers’ land notes until Q3 of 2022. Shortly thereafter, land at auctions started to bring less than prior auctions, clearly indicating the land market has stalled. If commodity prices pull back from their historically high levels in 2023, we could see an aggressive correction in the land market, especially in Western Kansas where drought conditions exist. The good news is this will create opportunities for buyers. For sellers, the silver lining is that banks are offering better terms on savings and CD rates.

### Interest Rates and Land Values

