Kansas Wheat Yield Outlook for 2026

Week 13 - (3/30/26)

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March 30, 2026

0.1 This week's prediction

Kansas wheat estimate for week 13 (March 30, 2026)
Yield range from 41 to 46.4
Predicted yield of 43.7
Note: This is the initial estimate for 2026

0.2 Introduction

The USDA collects weekly crop conditions throughout the growing season. The crop is rated as either very poor, poor, fair, good, or excellent. For wheat, these estimates are reported for a few weeks in late fall, then resume in the spring. As shown by Ibendahl in previous reports on AgManager.info, these crop reports can be used to build a model to predict final crop yields. In this publication, Ibendahl estimates Kansas wheat yields based on the week 13 (March 30, 2026) crop condition report from NASS.

As of week 13 in Kansas, for the winter wheat crop, 7% was rated very poor, 15% was poor, 38% was fair, 35% was good, and 5% was excellent. While it is still very early in the wheat season, this paper explains the model process and projects a possible yield. This paper is part of a weekly estimate of wheat yields for 2025 in Kansas. Results from this paper can be compared to the crop reporting district's predicted yields based on drought monitor data. All of these reports are on AgManager.info.

0.3 Background

The USDA has historical state wheat yields going back to 1866. Figure 1 plots these as a line graph. What is interesting about this graph is how flat wheat yields were until 1950. Since then, yields have been steadily increasing. As shown in Figure 1, a regression of the

last 30 years (the blue line) shows a 0.20 bushel increase in yield each year. The lowest yield in any year since 1970 is 25% higher than the highest yield before 1950.

Figure 1 also shows that the state-average wheat yield has substantial variability. Yields were only 28 bushels per acre in 2014, while in 2016, yields were 57 bushels per acre.

0.4 Estimate of Crop Condition

The weekly Crop Progress and Condition Report issued by the USDA National Agricultural Statistics Service includes temperature, precipitation, and progress of crop planting, development, and harvesting. This report is issued weekly, except during winter months when it is entered monthly. While this report provides current crop conditions, it doesn't make any yield projections for wheat. Predicting wheat yields can be difficult, as the crop often performs better than it looks in the field and can quickly improve with timely rains.

Some research has attempted to match crop condition reports to yields. Bain and Fortenbery (Bain, R. and T. R. Fortenbery. 2013. "Impacts of Crop Conditions Reports on National and Local Wheat Markets." Proceedings of the NCCC-134 Conference on Applied Commodity Price Analysis, Forecasting, and Market Risk Management. St. Louis, MO. [http://www.farmdoc.illinois.edu/nccc134] presented a paper that used an index of the crop condition report to estimate crop yields. Their procedure, described below, is used in this paper to show the relationship between crop conditions and wheat yields.

0.5 Procedure

Bain and Fortenbery construct an index of weekly crop conditions:

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CCIndex =
          (% acreage Excellent) * 1    +
          (% acreage Good)      * 0.75 +
          (% acreage Fair)      * 0.50 +
          (% acreage Poor)      * 0.25 +
          (% acreage Very poor) * 0
```

Weekly crop condition reports from NASS are available and go back to 1988. The start of the weekly wheat report in Kansas varies, but for all years since 1988, a weekly crop report

is available either the last week of March or the first week in April. There is also a series of crop reports in the fall before a break occurs. The last 20 years of the wheat crop condition for week 13 in Kansas is shown in Figure 2.

In this analysis, the March 30, 2026 crop condition reports (week 13) are used to construct a CCI index for the last 30 years. These CCI indexes are then used in a regression analysis to estimate wheat yield per acre, where yield is a function of the CCI index. To account for the yield trend, the actual model estimates the deviation from the trend as a function of the CCI index. Figure 3 plots the deviation from the state average wheat yield trend line on the left axis and the CCI index on the bottom axis. The dark gray band represents the standard error. The standard error of the regression is the average distance between the observed values and the regression line.

0.6 Results

As might be expected for a wheat crop condition report this early in the year, the model doesn't predict very well but is improving each week. Based on week 13 scores, the model predicts wheat yields with an R-squared of 0.21. The estimated yield equation is

Yield = 0.308 * CCI_score -17.2

That is, a 1% improvement in the CCI score can increase the average state yield by nearly 0.3 bushels per acre. However, the low R-squared value is due to the large variation in final wheat yield across CCI scores. In other words, the CCI index is far from a perfect indicator of final wheat yields in the state, especially with the winter report on crop conditions. The large variability is evident in Figure 3. A model that perfectly predicted yield would have all the individual points aligning along the blue regression line. Thus, the model presented here should be looked at as more of an initial impression of wheat yields in the state.

As of week 13 for 2025, the trend line yield is 44.2 bu/ac. The CCI score of 54 indicates that the model predicts a yield of 0.5 bu/ac below trend. Thus, the estimated yield for March 30, 2026 is 43.7 bu/ac with a range from 41 to 46.4 bu/ac.

0.7 Implications

Producers should view these results as only a guide and likely a best-case scenario for Kansas. The low R-squared value indicates that much could change before harvest. Some timely rains

in the next week would really help yield estimates. Likewise, little rain over the next two weeks will quickly push wheat conditions and yields down.

0.8 Contact

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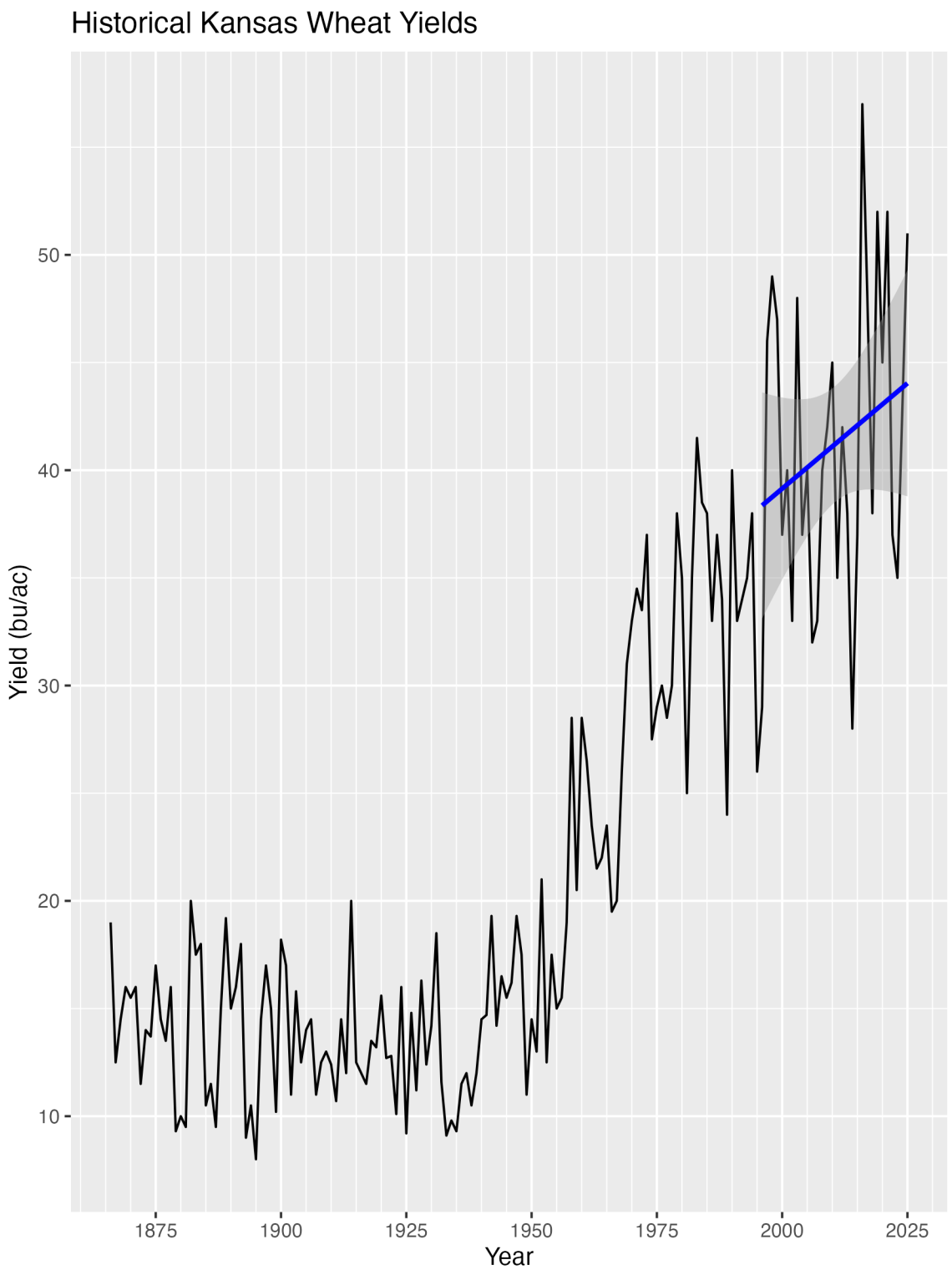

Figure 1: Historical State Wheat Yields from Kansas

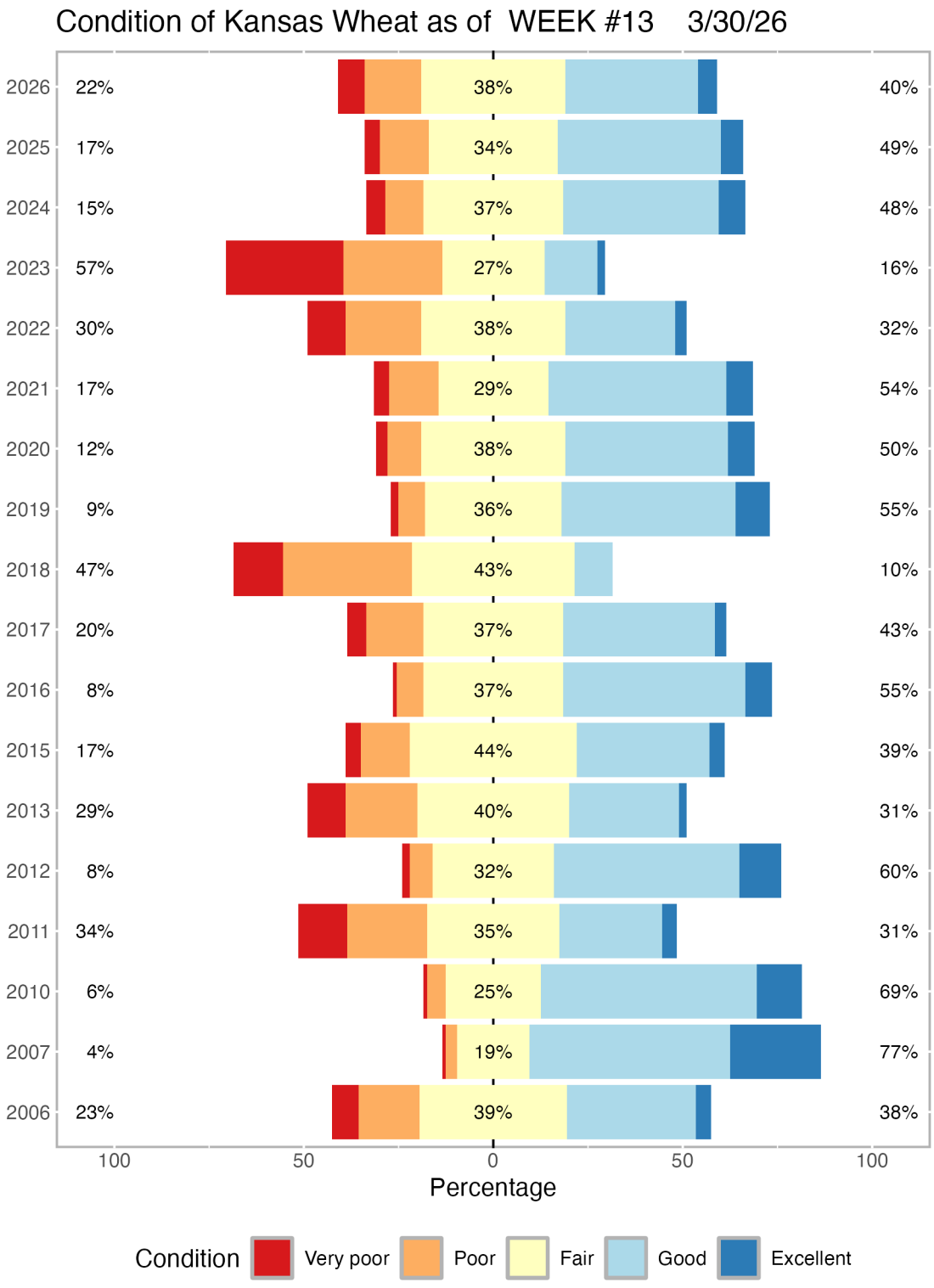

Figure 2: Historical Crop Conditions for Wheat in Kansas for Specific Week

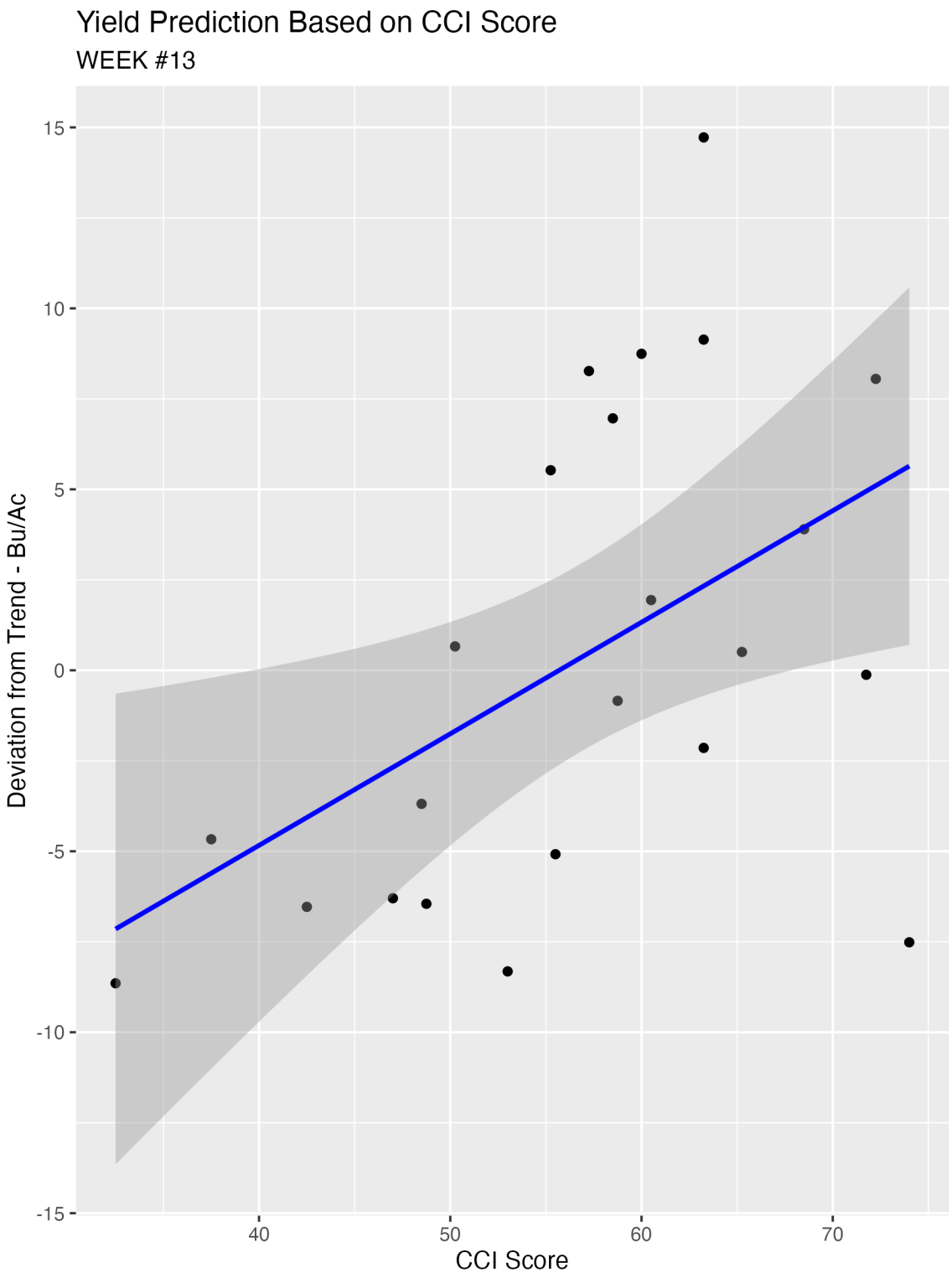

Figure 3: Expected Yield (Trend Deviation) for Various CCI Index Values for Specific Week