GROWING SEASON CHALLENGES FROM START TO FINISH

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On average, it has been a cold year in the prime central growing areas.

Growing degree days ran well behind normal.
The last 30 days were very cold with many record lows.

![Oct 15-Nov 15 Temperature Anomalies](image1)

We have had 4,700 record lows the last 30 days, 17,190 this year-to-date, 17,870 the last 365 days (NOAA NCEI Record)

**U.S. Daily Records Summary**

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>HIGH MAX</th>
<th>HIGH MIN</th>
<th>LOW MAX</th>
<th>LOW MIN</th>
<th>PRECIPITATION</th>
<th>SNOWFALL</th>
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</thead>
<tbody>
<tr>
<td>Last 7 Days</td>
<td>68</td>
<td>55</td>
<td>1300</td>
<td>1643</td>
<td>38</td>
<td>318</td>
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<td>Last 30 Days</td>
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<td>1009</td>
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<td>4700</td>
<td>1363</td>
<td>1288</td>
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<td>Last 365 Days</td>
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<td>26500</td>
<td>23501</td>
<td>17870</td>
<td>27769</td>
<td>8411</td>
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<td>Month to Date</td>
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<td>412</td>
<td>1949</td>
<td>2477</td>
<td>384</td>
<td>683</td>
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<tr>
<td>Year to Date</td>
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<td>24938</td>
<td>22287</td>
<td>17190</td>
<td>24550</td>
<td>7281</td>
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</table>

It was a very wet year in the central areas.

![U.S. Precipitation Map](image2)
See the departures in rainfall (inches) since April 1 when normally farmers are in the fields to prepare for planting or actually putting seed into the ground.

The average maximum temperatures in the primary corn and bean belt were below normal. Note the century trend is flat.

As expected, yield forecasts are down, the first year below the trend line in 6 years.
Grain production is down and may fall further.
Soybean production was down below trend line and production was down more than corn.
There is still grain in the field. As of November 10, sixty-six percent of the 2019 acreage was harvested by week's end, 17 percentage points behind last year and 19 points behind the 5-year average pace. Harvest progress was behind the average pace by 13 percentage points or more in ten of the 18 estimating states. Soybean harvest across the nation was 85 percent complete, 2 percentage points behind last year and 7 points behind the 5-year average.

Early snowcover slowed or stopped harvest.

A window has opened with warming after the killer cold for harvest in the central where there is something worth harvesting.

The next 5 days are warmer than normal.
It begins cooling days 5 to 10 and more so days 10 to 15.
It is wetter and snow will return across the northern states.
Flooded fields Illinois
Snow in Southern Canada on small grains (similar story into the northern Plains on grains and field crops)