Summary of weather and other factors affecting crop yields at Dickinson in 1949.

Snowfall for January was nearly 300% of normal, precipitation for this month being recorded at 1.23 inches. February precipitation was .19 inches above normal, .61 inches being recorded this month. Precipitation for March was identrical with that recorded the previous month, .61 inches, which was .15 inches less than the 57 year average for March. Total precipitation for January, February and March was 2.45 inches which was .82 inches above the 57 year normal for this period.

Spring runoff from melting snow was held to a minimum by heavy snow drifts over much of the land, which tended to hold back water from melting snow, preventing rapid runoff and permitting most of the water to soak into the soil.

Field work, well started by the middle of April, proceeded without interruption being favored by warm drying weather throughout the month. Several warm, windy days the latter part of April depleted surface moisture rapidly, which resulted in poor germination in many instances. Total rainfall recorded for April amounted to only .14 inches which is 1.15 inches below the 57 year average for this month.

Showers of .53 inches recorded on May 1 and .45 inches on May 30 were the only rains falling in this month that were effective as far as crop growth was concerned. Numerous light showers from a trace to .08 inches which fell during the month increased the total precipitation figure but were of little or no benefit to the crops. Total rainfall for May amounted to 1.33 inches which was nearly an inch below the 57 year normal for this month. The cumulative precipitation deficiency at the end of May was 1.77 inches. The drought continued through the month of June with only 1.21 inches of rainfall being recorded in this month which has a 57 year average of 3.54 inches. The rainfall deficiency for June, 2.33 inches, brought the cumulative deficiency to 4.10 inches. In addition, most of the June rainfall came in the form of light showers of a few hundredths inches which were ineffective as far as any great benefit to crops was concerned. The heaviest showers falling in June were .20 inches on the 16th and .32 inches on the 23rd.

Above normal July rainfall came too late to be of much benefit to small grains, especially the early ripening varieties, but late crops and grasses were helped considerably by this moisture. Total July rainfall, 2.84 inches, was .63 inches above the 57 year average for July which brought the precipitation deficiency for the year down to about three and one half inches.

A dry August and September completed a dry growing season with only .42 inches of rainfall in each month which brought the precipitation deficiency for the year to just over 5 inches at the end of September.

High winds on two occasions and a small amount of hail which accompanied one of the heavier showers of the season did some slight damage to small grains. However, the value of the moisture which fell with the hail more than balanced any damage resulting.

The past season, in addition to being a dry and unproductive crop year seemed also to be a very poor year for insect pests and crop diseases. Both stem and leaf rust of wheat did not appear until late in the season, and infections could then be measured only in trace amounts. For all practical purposes it could be said that there was no rust in this area this season. Readings on bunt infection in the Uniform Regional Bunt Nursery showed less infection than in 1948. Grasshoppers were more numerous this year than they had been in 1948, but were not present in sufficient numbers to cause measurable crop damage. This area was also free from attack by aphids and no Hessian fly or sawfly were discovered throughout the season.