

Heartland Bank and Trust Company's Agricultural Services Department is pleased to provide you with a copy of our 2007 Corn and Soybean Performance Results. Information is presented from seven replicated corn and three replicated soybean plots from a wide area throughout Central Illinois.

Many of us thought it would be a long time before a year like 2006 would be repeated. So much for that theory as 2007 was a great year. For the northern part of our service area, rains were very plentiful leading to record corn and soybean yields. As one moved south, there were drier conditions which led to somewhat lower yields. Still, corn yields in excess of 200 bushels per acre and soybean yields in excess of 60 bushels per acre were common.

Everyone knows rain is the main factor with yields, but what else had an effect?

- ▼ **Population, population, population** – We cannot stress enough the importance of final stands in corn. On a year like this where high yield potential is available, final stands are critical. Anything that reduces final stands, like crusting or planter skips, will reduce yield dramatically.
- ▼ **Drainage and nitrogen** – Any place water stood prior to or after planting caused us to lose nitrogen where it was already applied. Yield swings of well over 50 bushel per acre from high ground to low ground could be observed with yield monitors. N-Serve helped to reduce the loss, but did not eliminate it. This was a year when side-dressed anhydrous and spring applied 28% nitrogen had a comparative advantage.
- ▼ **Ear tip back** – We always say that if there isn't ear tip back, the corn could have been planted heavier. This year, there was very little tip back especially in those areas that had plentiful rain. Therefore, ears were bigger than last year, which led to better yields and made final corn stands even more critical.
- ▼ **Temperatures** – It was hotter than normal, especially early this growing season. A University of Illinois study showed very little affect on corn yields from June heat as opposed to July and August. Based on the results we had this year, we tend to agree with that assessment. There was concern about forecasted heat in August affecting kernel depth. However, most of August was not as hot as forecasted due to overcast days. At harvest, kernel depth was unaffected by August heat to a large degree.
- ▼ **Diseases and plant integrity for corn** – An abnormally large percentage of corn was sprayed with a fungicide this year, principally for Gray Leaf Spot. There may not have been the huge increase in yields that we saw last year, but many test results showed spraying increased yields more than enough to pay for the application. One thing is for sure, corn crop health and plant integrity was the best it has been in several years.
- ▼ **Diseases for soybeans** – There was a lot of Sudden Death Syndrome and other diseases, such as White Mold, in areas that had plentiful rain. We had good to excellent soybean yields overall, but these diseases did affect yields negatively. Producers reported yield increases from fungicide applications on beans this year; whether that will be true every year may be debatable.
- ▼ **Soybean insect pressure** – There were soybean aphids this year, although they did not reach the U of I's threshold for spraying in many areas. Still, soybean yields benefited five to ten bushel per acre from spraying in many fields, especially where spraying was done early.
- ▼ **GMO Seed Corn** – Seed corn with stacked traits yielded better as a general rule this year. That may be the biggest understatement of the century.

Thank you for your interest in our research summary. We would welcome the opportunity to work with you in your farming business. Please call any of our Ag Services representatives listed in this report. Best wishes for a profitable 2008!

Hearthland Bank and Trust Company's Agricultural Services Department would like to recognize and thank all who contributed to the success of our 2007 yield plots. The program is a lot of work and would not be possible without the efforts of many people. We also extend a thank you to the seed companies included within this report as well as the research plot operators and weigh wagon providers listed below.

▼ Plot Co-Operators

Anchor, Dan and David Eyer
 Arrowsmith, Dave Getty and Glen Wright
 Chenoa, Brian Schaumburg
 El Paso, Steve Schertz
 Hudson, Steve Kahle
 McLean, Randy and Jim VanHoorn
 Secor, Roger Bradle
 Weldon, Steve Perring

▼ Weigh Wagons

AgriGold, Barry Parsell
 Crows, Brad Hubble
 Heritage/Diener, Judd Stover
 Horizon Genetics, Eric Kuntzeman
 Pioneer, Dale Atkins and Keith Leman

▼ Leadership Team

Strong leadership is key to the success of any organization. Heartland Bank is supported by a dedicated and professional team of managers who are proud to call Central Illinois home. From helping families purchase homes to assisting customers with managing their assets, our management team carries out our mission of maintaining a community bank atmosphere while providing the competitive products and services you need.

▼ Fred Drake

President, Chairman, and CEO, Bloomington-Normal

▼ Patrick Busch

Executive Vice President, Bloomington-Normal

▼ Stephen Drake

Executive Vice President, Champaign-Urbana

▼ Lance Carter

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