

# PERSPECTIVES

OFFICIAL PUBLICATION OF CROP QUEST AGRONOMIC SERVICES, INC.

## Not Sitting Idle Wheat harvest, land management post harvest



by **Dwight Koops**,  
Regional Vice President  
Ulysses, Kan.

Good residue management is the key to success during the fallow period, whether that period of time is just a couple months or more than a year. More and more farmers are incorporating no-till or minimum-till farming practices into their operation. As this occurs, herbicides become the substitute for tillage, and the most important factor in using herbicides is timing. By the time you read this article, it is highly likely that you have, or should


have, already treated your wheat stubble for weeds the first time.

The next factor toward no-till success is commitment to the program. Sometimes sticker shock sets in after receiving the first herbicide bill, and people want to revert back to conventional practices. It is important to keep in mind the other benefits of no till or minimum till. These include erosion control, less compaction, less fuel, equipment and man power needs. In the arid West, soil moisture savings can be huge.

The task of choosing the proper chemicals and additives is where Crop Quest can truly help your operation. It is not as easy as just throwing some glyphosate out there, assuming all the

weeds are dead and presuming no more weeds are going to emerge. It is important to choose chemicals that will burn down the weeds, add residual control and allow for the proper crop rotation producers are looking for.

No-till or minimum-till management requires planning, and each producer's plan is unique to his or her operation. Crop Quest consultants rely on a network of agronomists that have helped develop the best management plans in the High Plains. A simple discussion about your goals can save you money, soil and moisture.

Check with your local Crop Quest agronomist for more information on developing a fallow herbicide program. 

## Defined Boundaries

Crop Quest, FSA can assist producers in developing field boundaries for accurate data collection



by **Nathan Woydziak**,  
Precision Ag Specialist  
Dodge City, Kan.

Five years ago, Crop Quest decided to implement a digital system to collect, report and query the daily agronomic information that had previously been handwritten. One of the first things to be accomplished was digital field boundary collection. Like most geographic information system (GIS)-based software, in order to operate SST FieldBook™, SST's first generation agronomic data collection software, producers must have a geo-referenced field boundary. Crop Quest began to collect field boundaries either by digitizing or using a global positioning system (GPS).

Two years and many mouse clicks later, Crop Quest had amassed more than 1 million acres of digital field boundaries.

Crop Quest is moving toward implementing SST Summit™, a software program that helps collect and computerize farm data as we're seeing more producers interested in computerized data collection. In part, this interest stemmed from the ability to transfer information between an agronomist's SST Summit and a producer's SST Summit – eliminating the need to re-enter data. First things first though. An SST Summit user must have a digital field boundary before beginning to collect data. There are basically two ways a boundary can be created:

- 1) a GPS, or
- 2) digitized on a GIS.

Digitizing is simply drawing a boundary on a computer using an aerial photo or some other geo-referenced file for an outline.

Below are a few places where field boundaries may have

*Continued on page 2*

# QA



by **Jim Gleason**,  
Regional Vice President  
St. John, Kan.

## Q Do I need to be concerned about soybean aphids in the High Plains area?

**A** Last year, the soybean aphid was a common pest in soybean fields across much of the Corn Belt. The aphid also was found in five eastern Kansas counties during August and September last summer. However, the soybean aphid did not reach economic threshold levels in Kansas that required treatment.

The soybean aphid is a small, greenish-yellow aphid with back “tailpipes,” or cornicles, near the tip of its abdomen. It is the only aphid in North America, at this time, to develop large colonies on soybeans. Like other aphids, the soybean aphid sucks juices out of the plants and robs them of energy that would normally go into seed production. Soybean aphids can be controlled with some of the common pesticides used for aphid control.

The outlook for the 2004 season shows a possibility the soybean aphid will be found again in the eastern half of Kansas. The earlier that aphids are found will increase the likelihood the pests may reach treatment levels. There is also a slight chance aphids may be found as far west as the Colorado border based on expansion patterns during the past few years. The soybean crop will need to be monitored for this pest in the coming season.



## Get Updated!

**CQ Perspectives** is updated online every other month. To be notified when Web updates are posted, send an e-mail to [rohanlon@cropquest.com](mailto:rohanlon@cropquest.com) with “subscribe” in the subject line.

### Defined Boundaries *Continued from page 1*

already been collected for your farm:

**Crop Quest:** If your agronomist is providing digital reports generated by FieldBook, then digital field boundaries are available from the Crop Quest Information Lab. If your goal is to transfer information between a CQ agronomist’s Summit and a producer’s Summit using the same boundaries, using Crop Quest will make the process much simpler. An easy way to ensure the boundaries are the same is to request your boundaries come from the Crop Quest Information Lab.

**Farm Service Agency (FSA):** Most of the FSA offices are migrating to GIS for acreage determination and, therefore, should have field boundaries available.

Recently, Crop Quest’s Precision Ag staff had the opportunity to visit with Joseph Gleason, Executive Director of the Ford County, Kan., FSA office. Gleason explained the protocol for getting a farm boundary from the FSA office is still being worked out. In general, if a producer requested his or her farm boundaries, the FSA office could provide them in Shapefile format on a floppy disk or CD. Both SST Summit and the Crop Quest Information Lab are capable of loading a Shapefile.

Gleason explained that 99% of the FSA boundaries were originally digitized. The other 1% collected with a GPS are generally waterways or Conservation Reserve Program (CRP) acres within a field. In Kansas, the digitization process likely took place at the Hays FSA office or on the Fort Hays State University campus by trained students. After the boundaries were digitized, they were then sent back to the appropriate FSA office where editing was, and continues to be, performed. Anyone having dealt with field boundaries knows they are continually evolving as the boundaries change due to terracing, CRP, waterways, pivots, tree removal, etc.

The FSA boundaries are basically divided into three categories: cropland, CRP and native grass. Due to this categorization, there are both advantages and disadvantages to using the FSA field boundaries in SST Summit.

#### Some of the advantages of the system are:

- Saves time in creating the boundaries (new boundaries can be digitized in SST Summit or collected using a GPS – both of which take time but are fairly simple processes).
- Allows producers to quickly find the locations of their fields for redigitization. The Crop Quest Information Lab can use these boundaries as benchmarks to locate and redigitize new boundaries if additional detail is required.

#### Some of the disadvantages of the system are:

- Boundaries are not currently as detailed as some would prefer. Although, over time, these boundaries will become more detailed to include waterways, pivot roads, etc.
- Cropland boundaries are not delineated as irrigated or dryland. In other words, the FSA boundary for a quarter section with a pivot would be digitized as shown in Figure 1. Figure 2 shows a field with the irrigated and dryland split. Crop Quest boundaries have been traditionally split in order to manage irrigated and dryland records separately.

Field boundary collection, while a relatively simple part of the process of data collection, plays an important role as the foundation for future data layers.

Take some time at the beginning, get some help if needed, and set up quality boundaries that fit your needs. This will help ensure clean, simple data collection down the line.

As always, if you have questions about data collection software, field boundaries or Precision Ag, please visit with your Crop Quest agronomist or contact the Precision Ag staff.

Fig. 1

Fig. 2



# Making Decisions Based on Changing Weather Conditions



by **Ron O'Hanlon, President**  
Member, National Alliance of Independent  
Crop Consultants, CPCC-I Certified

The weather continues to have a major impact on crops and cropping decisions. Much of the High Plains area has been plagued with drought conditions for the last four to five years – even longer in some extreme locations. The western side of the High Plains geography has been more severely affected than the eastern side. It has taken both farmers and agronomists time to adjust their plans to account for the impact of a long-term drought. Many people under the age of 60 have never experienced such a long-term drought period. It has been reported that this drought is the worst in more than 100 years for much of the area.

Every year, farmers and agronomists make cropping decisions as to what crops should be planted, what planting rates should be used, how much tillage to use and how much pre-watering should occur (on irrigated ground) before the crop is even planted. Decisions are made to reach a balance between keeping cost as low as possible, staying within the water usage permits, trying to outguess what Mother Nature has in store for the current season and maximizing the potential yields for the crops being planted.

In the early years of the drought, many of us were caught off guard. Experience had shown we could stretch our resources to their limits, and Mother Nature would eventually provide a needed rain shower to save the day, or at least it wouldn't be a complete disaster. As the drought has continued, decisions are now being made to account for the fact that normal rainfall

for this area is no longer reliable. Much more pre-watering has occurred. Alternative crops, such as cotton, have found a place. Seeding rates have been adjusted. No till and minimum tillage have increased. And some fields that shared water are no longer planted to allow greater water utilization on a limited number of acres.

We all know it is extremely difficult to forecast conditions that might happen in the future, but it is still the best information we have at this time. Even the current forecast through September of this year shows a continuation of the drought in some areas according to the National Weather Service and NOAA.

Information and forecasts are other tools farmers and agronomists can use in making those cropping decisions. With the improvement in commodity prices during the past six to eight months, it is critical that farmers have good yields to capitalize on the current price conditions to survive the effects of this long-term drought.

**For more drought monitoring information, please visit the following Web sites:**

- 1. U.S. Drought Monitor**  
<http://www.drought.unl.edu/dm/monitor.html>
- 2. NOAA Seasonal Outlook**  
[http://www.cpc.ncep.noaa.gov/products/expert\\_assessment/drought\\_assessment.html](http://www.cpc.ncep.noaa.gov/products/expert_assessment/drought_assessment.html)

## Making Your Water Work for You



by **Dwight Koops,**  
Regional Vice President  
Ulysses, Kan.

Water has become the most valuable input due to the declining supply, regulated allotments and high energy costs incurred delivering water to the crop. It is important to generate as much income as possible for every inch of water pumped. In many cases, producers still see the highest return on their irrigation dollar by growing the best corn crop possible, simply due to the quantity of bushels that can be produced.

However, there are wells that just cannot pump enough water to sustain a good corn

crop. In these instances, other crops need to be considered. The same principles apply, but irrigation expense is not the only consideration.

For instance, cotton does not require as much water as corn, therefore, the irrigation expense is much less for cotton, but the overall expenses for other inputs rival the overall expenses of corn. It is important to look at the whole picture.

Timing of water application is crucial. “When” water is applied matters as much, or more, than “how much” water is applied. Our experience has proven that pre-watering ground vastly improves the chances of growing a successful crop. When you are dealing with small wells, trying to play “catch up” by only watering during the growing season reduces the chance of success.

Another common mistake is trying to hurry water across a field. We see so many fields that soak less than six inches into the soil profile with each pass of water. Yield can be correlated very closely with the depth of the soak. Slow, steady, deep soaks over a season will pay great dividends.

This can only be achieved on small wells by starting early, pre-watering and making slow passes while the crop is growing, especially when the crop is small.

Other factors that are involved include crop rotation, splitting water between summer and fall crops, soil texture, residue management and compaction issues. Your Crop Quest agronomist is available to help with all these decisions on your farm.

# Kansas Census Highlights

The 2002 census has revealed some distinct changes in Kansas farms from the last census taken in 1997. The national trend towards consolidation is reaching Kansas farms, and that trend is represented in the state's statistics, notes Eddie Wells of the Kansas Agricultural Statistics Service.

The number of Kansas farms has decreased by 1,062. There were 65,476 farms in Kansas according to the 1997 census, while the 2002 census showed only 64,414 farms. On the other hand, the number of acres used for farming in Kansas increased by 577,326 acres.

"There's definitely trend towards consolidation of farm operations," Wells says. "Historically, if we look at the poultry industry, there are only 10 or 12 major egg producers remaining in the United States. The hog industry has been moving in this same direction for the past 20 years. Although at a slower pace, the cattle and row crop operations seem to be moving in this same direction."

According to the census, a farm is defined as, "any place from which \$1,000 or more of agricultural products were produced and sold, or would have normally been sold, during the census year."

The trend to consolidate farming operations has not affected the small, or hobby, farmers. In all categories of Kansas farms by value of sales, the only category showing increases were farms with less than \$2,500 in sales, which now total 20,444 – up from 13,350 in 1997.

"There has been an increase in the number of lower-income farms, or hobby farms," Wells says. "The primary income to support the family in this category of sales comes from non-farm sources. The challenges faced by operators in the middle level of sales could force those farmers to make difficult decisions. Oftentimes, these farmers are already operating a good-sized farm and working off the farm full or part time. The physical and financial stress of that situation may force the farmer to decide between expanding the size of the present operation and returning to full-time farming, scaling back the operation to a hobby-type farm or get out of farming altogether."

The 2002 census also showed the average age of principal operators in Kansas is 56 – this is an increase of 1.7 years from five years ago.

"The average age of the Kansas farmer may tell us several things," Wells notes. "A reduction in the average age may say the state is doing a good job of replacing retired farmers with farmers from the next generation. If the average age is increasing, this may be signaling us that we are not passing the baton onto the next generation or that consolidation is trending towards the established producers. However, there are numerous variables that affect this statistics.

"For instance, a person who operates CRP acres only will meet the definition of being a farm if they have CRP income of \$1,000 or more during the year. Many times, these operators are retirees who may never have been involved in traditional farming. Adding these new farmers who are beyond retirement age may skew the average age statistic."

The 2002 census also reports a decline in the number of harvested cropland acres in the state when compared to 1997. The 2002 crop year experienced very hot and dry weather conditions that led to an unusually large number of acres abandoned. Reduced harvested acreage, poor yields and low prices contributed to a drop of more than 50% in average net farm income per operation to just more than \$13,000 per operation.

## Other Kansas census highlights:

- The size of the average farm increased by 21 acres to 733.
- The estimated market value of land and buildings used for farming increased by \$88,295 from \$417,704 in 1997 to \$505,999 in 2002.
- The number of farms with 2,000 acres or more increased by 334. In 1997, the census showed 5,947 farms, and in 2002 this category increased to 6,281 farms.
- The number of farms with 1,000 to 1,999 acres decreased by 394. Farms with 500 to 999 acres decreased as well, by 827.



## Mission Statement

Crop Quest is an employee-owned company dedicated to providing the highest quality agricultural services for each customer. The quest of our network of professionals is to practice integrity and innovation to ensure our services are economically and environmentally sound.

Crop Quest Agronomic Services, Inc.  
Main Office: Phone 620.225.2233 • Fax 620.225.3199  
Internet: www.cropquest.com • cqoffice@cropquest.com

### Crop Quest Board of Directors

President: Ron O'Hanlon  
Director: Jim Gleason  
Director: Dwight Koops  
Director: Cort Minor  
Director: Chris McInteer



*"Employee-Owned & Customer Driven"*

PRSRT STD  
US POSTAGE  
PAID  
DODGE CITY KS  
PERMIT NO. 433