

# Sharing Global Crop Management Techniques Can Help Growers

By Jennifer Bremer

No two farmers raise their crops exactly the same; and being open to different ways of management is important for getting the most out of each and every crop.

Phil Needham, owner of Needham Ag Technologies, LLC, said U.S. growers could learn about new and different management techniques from English growers, during an Ag Issues Forum at the Commodity Classic, sponsored by Bayer Crop Science, recently.

"English wheat fields are unbelievable. With a slightly cooler and longer growing season, a lot of improvements have been made at the grower level over the past 20 years and I have experienced field yields as high as 224 bushels of wheat per acre" he said.

Needham said their management practices are more intense no matter what crop they are growing and uniformity in the field is very important to them.

Needham said he has a program utilizing and instigating change by taking growers to the U.K. to see what those growers are doing and then come back to the U.S. to spread the word about their techniques--differences in planting, spraying and harvesting equipment.

Needham said the four major components affecting wheat yield are: the number of heads per square yard, the number of spikelets per head, the number of grains per spikelet and the weight of each grain or test weight.

"These are the basic elements that growers need to look at when trying to increase yield," he said.

Starting with good, high quality, clean seed is very important, followed by treating the seed with a seed treatment fungicide.

An increasing number of U.K. growers now use no-till in order to conserve moisture for the establishment of a good stand. Research shows that wheat yields better and growers have a higher profit level by using no-till.

The biggest challenge faced by U.K. growers is nutrient management. Regulations make it difficult for farmers to apply some forms of fertilizers, and different types of fertilizers are applied in different ways. Most European countries even ban nutrients like nitrogen being applied in the fall or very early spring, to help reduce nitrogen losses and groundwater pollution.

"With more intensive growth management, we see an intense increase in yields," he added. Some areas of the US that Phil has worked with for 20 years or more have experienced a doubling of wheat yields at the state level. Kentucky would be an example, where yields have risen from the 30-40 bu/ac range to the low 70's as a state average, with some of the most aggressive producers averaging over 100 bu/ac some years.

Some of the biggest challenges seen worldwide include the population increase in China. While they are currently the largest producer of wheat, their continual growth in population may change that. Needham said the largest problem many Chinese growers have is soil erosion. The field sizes are small, some are even planted and harvested by hand.

One of the biggest competitors for US producers is Russia, a country that could be utilized much more for farming. Instead some of the most productive land sits idle, as funds are not available at the grower level to plant or look after a crop.



GLOBAL PERSPECTIVE--Phil Needham, president of Needham Ag Technologies, LLC, discussed how farmers can learn about new techniques from other farmers around the world, during the Ag Issues Forum sponsored by Bayer CropScience recently. (Journal photo by Holly Martin.)