



Our Mission: To promote and implement the 4Rs of nutrient stewardship (right source, right place, right time, right rate) to minimize environmental impact, optimize harvest yield and maximize nutrient utilization.

IN THIS EDITION:

- CPS’s Will Glazik supports the 4Rs with Variable Rate Application and Nitrogen Management
- NREC Funded Research Brings Together Universities, Farmers, Landowners and Ag Retailers
- Fertilizer Sales Trends Illustrate Changes Occurring in 4R Practices
- Illinois CCA Programs Leads the Nation

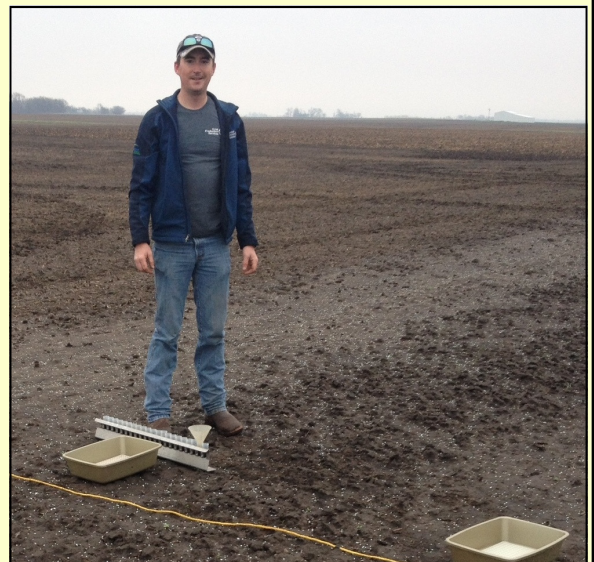
Ag Retailers in Action: Will Glazik, Crop Production Services, Melvin IL

This month, **Will Glazik** is our featured 4R retail advocate. Will is a Crops Consultant with Crop Production Services (CPS) working out of the Melvin, IL facility. Will provides agronomic recommendations and services to farmer customers in Ford, Iroquois, McLean and Livingston counties. “Fertilizer prices remain high, and farmers continue to look to improve the utilization of their crop inputs; they are also increasingly aware of the need to address environmental concerns, so that factor has also influenced rapid adoption of more 4R approaches” according to Will. This summer, Will receives his Certified Crop Adviser designation, having passed the exam recently and accumulating the necessary educational credit hours. He points to several areas where he sees significant strides:

Variable Rate Technology (VRT): Will’s customers are increasing the number of acres receiving VRT DAP (diammonium phosphate) and potash applications. VRT application rates are based on soil tests, but Will takes it a step further and incorporates yield data along with the soil test to show the true value of VRT to the customer at harvest. He is also participating in the NREC study that is evaluating P & K removal rates for crops, sending grain samples in to UI for evaluation. Using VRT and ensuring fertility recommendations based on soil tests, yield and crop uptake of nutrients are all critical parts of a 4R program.

Nitrogen Management Systems: Will is big proponent of the N-WATCH program to evaluate soil nitrate levels following nitrogen applications and during changing environmental conditions. In the fall of 2014, very little anhydrous ammonia was applied in his trade territory, and farmers are now busy with spring fertilizer and over 75% of his customers are splitting their spring applications. His is a proponent of ESN, an encapsulated slow release form of nitrogen that is incorporated after application, as well as putting down liquid nitrogen with the planter and side-dressing later in the season with liquid or anhydrous ammonia.

Challenges: Will says the biggest education hurdle is ensuring that the farmer’s view of nitrogen rates take into account not just yield goals, but also economic and environmental considerations. He promotes the MRTN (maximum return to nitrogen) but says farmers are bombarded with messages that focus on yield alone and leave out the other factors that ultimately ensure long-term profitability and environmental responsibility, but he says good progress is being made on the “right rate.” Keep up the good work Will!



Will performs a “pan” test during a recent spring application of ESN, to assure even spread.

NREC Projects Link Universities, Farmers, Landowners and Retailers

In 2015, the Illinois Nutrient Research & Council (NREC) is funding 20 projects, many of them directed at the activities recommended in the Illinois Nutrient Loss Reduction Strategy. One project is located in a farm field in Douglas County, IL and is headed up by two very experienced University of Illinois researchers, Dr. Mark David and Dr. Emerson Nafziger. These researchers, UI professional staff and graduate students are working directly with the landowner and a farmer on a flat, tile drained field corn and soybean field.

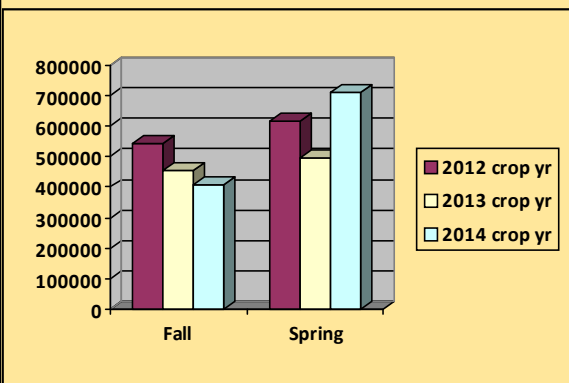
The local ag retailer, United Prairie, is providing the application services to test various source, rate, time and placement of nitrogen and there are monitors at the end of the file tiles to study how various practices impact nutrient losses from tile drained fields. The farmer and landowner are very interested in seeing the results as is the industry with regard to fine-tuning of fertilizer applications to minimize losses, with the intent to publish findings from this project and build science based methods to reduce nutrient losses. IFCA's Dan Schaefer helps coordinate the activities at the site to assure the research activities do not interfere with the farmer's cropping activities. It is truly a team effort. A similar study is underway at Illinois State University, also on a farmer's field and engaging ISU researchers, graduate students, and the IFCA staff.

United Prairie, a local ag retailer, custom applies the nitrogen treatments at the NREC research site.



Fertilizer Sales Trends Tell Story of Changing Management Practices

The Illinois Department of Ag requires fertilizer retailers to report each fall and spring fertilizer sales. In 2012 the ag industry launched a concerted effort called "Keep it for the Crop" and began educating fertilizer retailers and farmers about the need to manage nutrients to improve utilization and reduce losses. Nitrogen losses from tile drained agricultural fields is a particular challenge and the fertilizer industry has been focused on encouraging "nitrogen management systems" where we split the total recommended nitrogen rate over a series of applications. We also recommend reducing fall applied nitrogen rates and insist on the use of a nitrification inhibitor to keep the nitrogen in a non-leachable form as long as possible.



The graph to the left (in tons) shows the 2012, 2013 and 2014 crop years comparing fall nitrogen sales to spring nitrogen sales. You can see the downward trend in fall nitrogen sales and an increase in spring applied fertilizer sales. We continue to work closely with the University of Illinois to feed on-farm nitrogen rate trials into the Maximum Return to Nitrogen (MRTN) calculator to improve rate recommendations and we use N-WATCH to evaluate the conversion of fall applied nitrogen from its ammonium form to its nitrate form and use those results to educate farmers about the importance of

proper fall application. All these dynamics change with weather, but overall the educational process is making a significant difference, farmers also see it in their yields, and IFCA members are working hard to continue these positive trends!

Illinois Certified Crop Adviser Program Going Strong

Illinois has 1,250 Certified Crop Advisers, counting those newly certified this year. We have consistently led the nation as the state with the most individuals taking the initiative to demonstrate their professionalism and become certified in agronomic methods. The first CCA group earned their certification in 1993, and over the years have logged thousands of hours of CEUs. Illinois also has the second highest number of Certified Professional Agronomists, second only to California. With this dedicated team of professionals, Illinois CCAs are making a substantial difference in making one-on-one nutrient stewardship recommendations with tens of thousands of Illinois farmers.