



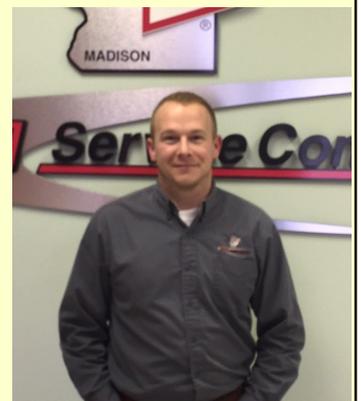
Our Mission: To promote and implement the 4Rs of nutrient stewardship (right source, right place, right time, right rate) to minimize environmental impact, optimize harvest yield and maximize nutrient utilization.

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- **Illinois CCAs Participate in Training and Take the 4R Certification Exam**

Ag Retailer in Action: Bryan Fairfull, M&M Service Co., Carlinville IL
Tackling the 4R's From All Angles

Bryan Fairfull is the Agronomy Marketing Manager for M & M Service Company located in Carlinville, IL and he's noticed the industry's increased focus on sustainability. It's not just about meeting yield and productivity goals, but how these goals can be achieved using proper nutrient management practices.



“When I first came on board in 2010, M&M had already started putting on post applied urea as part of a split nitrogen program.” He also says that they've been using variable rate technology (VRT) since the 1990's to focus on ensuring the optimum amount of P and K applied based upon soil maps. With VRT, they also feel they have found methods to better utilize the nitrogen in the DAP they spread in the fall. They are active in the IFCA Keep it 4R Crop Program, and participate in the NREC funded Nitrogen Rate Trials to help better understand the best N rate to use on a specific customer's field. They also have N-WATCH sites that they use to inventory and track plant available nitrogen in the field before, during and after the growing season and promote the MRTN (maximum return to nitrogen) calculator for rate and economic guidance regarding nitrogen and are looking weather information as well.

M&M also has their own research plot, called Solutions at Work, in Litchfield. Here, they apply new products that are coming out, testing them with a variety of nutrient management practices before recommending it to their customers. Bryan feels that it is important to for M&M to have a hand in some of the research being done. As he puts it, “There is so much money being invested based on guesses. Using the 4R's and research, we can ensure that we can use the best scientific methods possible when applying nutrients in the field.”

When asked how their customers have reacted to the sustainability movement M&M has incorporated over the years, Bryan's answer was very clear. “They love it. They've taken off with it. It used to be common practice to just throw an extra 20 to 50 pounds of N on back in the day just to be sure. But with the cost of inputs and the realization that we are losing nutrients, the whole 4R concept of applications of fertilizer have taken off tremendously.”

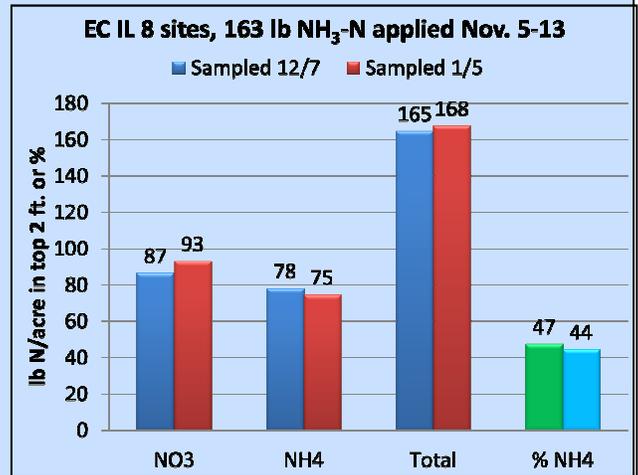
With reactions like these from their customers and the faith they have in the 4R's, it is no surprise that Bryan took the 4R pledge for the IFCA 4R Code of Practice. **“It's the right thing to do. All retailers in my opinion need to take the Pledge. We need to be the trusted agronomic providers for our growers, both economically and environmentally.”** – Bryan Fairfull

Is Fall Applied Nitrogen Still in the Field? That's the Question After N Levels in Lakes Rise

The IFCA 4R Code of Practice promotes delaying the application of anhydrous ammonia in the fall until the soil temps fall to 50 degrees at the 4 inch level, and the application should also include N-Serve™, a nitrification inhibitor. N-Serve inhibits soil bacterial activity that can convert ammonium (a stable form of nitrogen) to nitrate (a form that can leach with water movement). Ag retailers and farmers did a tremendous job following this 4R practice and the majority of anhydrous ammonia was applied between November 9-20 and stabilized. Ten years ago, application frequently began in mid-October.

But with the warm temperatures in December and above-normal rainfall, many are asking “Is my fall applied ammonia still there?” This question is even more relevant considering the nitrate levels in many of the surface water lakes has risen since the rainfall events in December, including in Lakes Springfield, Bloomington, Decatur and Vermilion. While the cause of nitrates rising in December is not exactly known, we do have a window into where the fall applied nitrogen is at this point in time.

Utilizing N-WATCH, IFCA sampled numerous fall applied sites in central Illinois and the chart below shows the average rate applied at these sites and the status of nitrate (NO3) and ammonium (NH4). While conversion to nitrate is around 50%, the rate of nitrogen applied is still present in the soil profile as January 5, 2016. Since then soils have frozen which further inhibits conversion to nitrate.



Dr. Emerson Nafziger who is engaged in soil N tracking studies funded by NREC, stated “We are optimistic that most of the fall applied N remains in the soil, but several months remain before the 2016 corn crop starts to take up N. As long as rainfall remains low, N movement will be slow, so dry spring weather will help keep N in the field. We’ll keep watching soil N and will keep our fingers crossed that we don’t have a wet, early spring that will increase the potential for N loss before plant roots are there to take it up.”

IFCA will continue to stay in contact with water supply officials as we engage N WATCH again in the early spring to keep them informed on what we are seeing in the soil profile with regard to nitrate levels and movement.

Illinois Certified Crop Advisers Take 4R Certification Exam

On February 5, 2016, 60 Illinois CCAs took a difficult 4R exam in their quest to become 4R Certified. The 4R Nutrient Management Planning Specialist Exam was developed by the American Society of Agronomy and the International Certified Crop Adviser Program. The 4R certification allows CCAs who advise on nutrient management to become more visible and recognized for their knowledge and skills so they can help meet the need for improved water quality and environmental stewardship.

IFCA and the IL CCA Program received a grant from NREC to provide targeted classroom and webinar training to help CCAs prepare for the exam. The classroom training taught by Dr. Bill Simmons of the University of Illinois occurred on January 19, 2016 at the IFCA convention and in subsequent webinars that were sponsored by the Illinois Soybean Association. Illinois leads the Midwest in the number of CCAs who took the first 4R exam, and the exam will continue to be offered annually and promoted by IFCA and the IL CCA program. It will take about 4-5 weeks before the exam results are released.

OVER 100 IFCA MEMBERS HAVE TAKEN THE 4R CODE OF PRACTICE PLEDGE. To see the Code and who these stewards and 4R leaders are, go to www.Keepit4RCrop.org and click on “Who’s Taken the Pledge.”