ARA

Legislative Column

ARA & Ceres Solutions Host Tech Tour

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On May 27-28, ARA and Ceres Solutions hosted U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) and Environmental Protection Agency (EPA) officials in Terre Haute, Ind., to discuss the latest precision agriculture technologies and conservation efforts being implemented by agricultural retailers and their farmer customers. The goals of the meeting were as follows:

- Familiarize and demonstrate how agricultural retailers are using technology within our industry segment.
- Inform USDA and EPA about continuing efforts to reduce spray drift through machinery improvements and adjuvant products.
- Discuss the role of ag retailers in conservation implementation.
- Note potential partnership opportunities between USDA and ag retailers to improve crop yields to meet today's global demand for food, feed, fuel and fiber, while implementing conservation and stewardship programs to protect the nation's land and water for future generations.

USE OF TECHNOLOGY SEASONALLY

The tour kicked off with a meet and greet hosted by ARA Chairman Dan Weber of Ceres Solutions on Tuesday evening, May 27. More than 35 people from ARA, Ceres Solutions, USDA, EPA, Agribusiness Association of Indiana, other local ag retailers and state and local officials attended. On Wednesday morning, May 28, tour participants were provided an up-close demonstration of the latest spray drift reduction technology being used on application equipment operated by Ceres Solutions on their farmer customers' agricultural land.

Following the demonstration, agronomists and technology specialists with Ceres Solutions (Dan Weber, Betsy Bowers, Brian Gum, Jason Stonecipher) discussed how ag retailers use precision agriculture technology seasonally and the specific benefits to the adoption of that technology. For example, in the fall there is an intensive soil sampling and mapping process, variable rate application technology of crop nutrients and yield data collection.

In the late fall/winter, the nutrient management and pest management plans are developed, variable rate technology application of anhydrous ammonia and crop protection materials occur as well as thorough yield data analysis. During the spring, there is intensive soil sampling with variable rate technology application of crop nutrients, controlled crop protection application of burndown and pre-emergence products using liquid controllers—Case IH's AIM Command Spray System, auto steering, auto-boom shut-off and automatic boom height control. In the summer, there is controlled crop protection application post-emergence, scouting with handheld computers as well as agronomic business meetings.

An overview was provided of the types of guidance products available (WAAS, Omni and RTK), which provide varying degrees of accuracy. All of these systems provide global positioning system corrections during the application process. They are very accurate and help reduce chemical loads, minimize seed costs and lower operating costs.

More and more ag retailers are shifting to the RTK system due to its high accuracy (down to inches), its repeatability over time and signal acquisition time (which is typically less than 1 minute).

These technologies used by ag retailers provide their farmer customers with value-added services, stronger relationships and better efficiencies and accuracy. Jason Stonecipher, technology manager for Ceres Solutions, estimated that currently 10 percent of farm acreage serviced uses RTK technology.

AG RETAILERS' ROLE IN CONSERVATION

Ag retailers provide their farmer customers with nutrient and pest management plans for the Environmental Quality Incentives Program (EQIP). In the state of Indiana, the State Technical Committee has a representative from the ag retail segment. USDA's National Agronomist Norm Widman indicated that USDA was looking for

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input on more concise nutrient management plans. Ag retailers could play the role of third-party verifier to ensure farmers were following their nutrient management plans.

WELL-TRAINED WORKFORCE

USDA and EPA officials were then provided an overview of the Certified Crop Advisor (CCA) program, which is a voluntary agronomic professional certification program. This is the largest certification program in agriculture with more than 13,000 members nationwide.

MANAGING SPRAY DRIFT

George Watters, regional agronomist with Winfield Solutions, LLC, spoke about the major factors affecting spray drift and the latest technologies available to reduce drift. Key factors to minimizing spray drift include consideration of wind speed and direction and climatic conditions (hot/dry, inversion, etc.), selecting the proper equipment (nozzle type, size and pressure) and use of drift control agent to maximize spray deposition and reduce spray drift. Consideration of all of these factors and proper use of available technology will reduce spray drift and help maximize performance.

Following the board room presentations, there was an open dialogue between USDA and EPA officials and Ceres Solutions staff and ARA on how to work more closely with USDA-NRCS officials to improve conservation policies and federal regulations and accelerate the use of improved precision agriculture technologies by agricultural retailers and their farmer customers.

The final stage of the tour involved attendees travelling to a local farm serviced by Ceres Solutions to visit with a farmer and to ride on equipment as he planted corn using RTK and to view yield monitor data. Some attendees also toured a local Ceres Solutions retail location to view environmental and safety site improvements.

Farmers that are currently using precision agriculture technology have seen greater yields from their crops, while improving conservation and stewardship efforts. ARA believes there are opportunities available for USDA-NRCS to promote the use of improved technologies through financial assistance targeted to agricultural retailers and their farmer customers as a result of passage of the 2008 Farm Bill Conference Report (P.L. 110-234). The 2008 farm bill provides increased funding for conservation programs and includes positive reforms to the Technical Service Providers (TSP) program.

We appreciate USDA and EPA officials for taking time to participate in this technology tour and look forward to a long-lasting partnership to address conservation and environmental issues facing the nation's agricultural industry. ARA also appreciates Dan Weber and Ceres Solutions for hosting this tour and all of their efforts to promote the latest in precision agriculture technologies. AG

Brian Gum, technology specialist at Ceres Solutions shows latest precision ag technologies to USDA and EPA officials.

L to R: Gary Mast, USDA Deputy Undersecretary of Natural Resources, Jack Eberspacher and Dan Weber.

L to R: Pat Cimino, specialty/minor crop advisor, EPA Office of Pesticide Programs; Ed Carmichael, local farmer, and Betsy Bowers, agronomist with Ceres Solutions.

Group discussion of how ag retailers use precision ag technologies to improve their business.

Tour participants at farm include ARA staff, Ceres Solutions employees, EPA and USDA officials.