

The 2018 4R Story

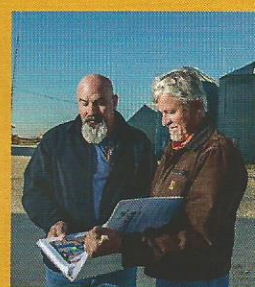
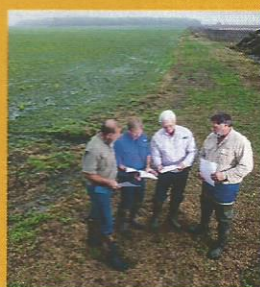
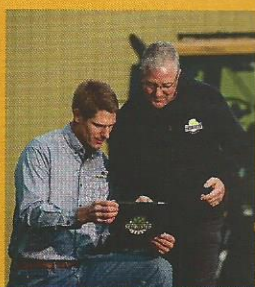
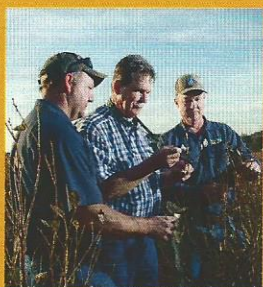
These farmers and their retail partners use the 4Rs of nutrient stewardship to increase soil and crop productivity and health, enhance ROI, and strengthen the sustainability of their farms.

This year's 4R Advocates showcase the reality that 4R Nutrient Stewardship principles are effective in any farming situation. They've proven the efficacy of using the right source of fertilizer at the right rate, at the right time, and in the right place in citrus, corn, hops, rice, soybeans, and other crops. In doing so, they've reaped the rewards of more robust crops, improved soil health, and created better farming environments in their communities.

Advanced production practices are common among the group. All use minimum-tillage or no-tillage. Soil sampling is among standard procedures. Cover crops and accounting for their nutrient credits are the norm. GPS tillage precision planting and nutrient application ensure accurate seed placement and targeted nutrient application. Plant tissue testing and foliar application are second nature. Fertigation is common. Micronutrients are important soil and plant health components. Livestock contribute to some of the operations, as well.

Their conservation practices get noticed. Some place acres in the Conservation Reserve program to support wildlife and bee habitats. Riparian buffers, dry dams, buffer strips, grass waterways, and terraces control water flow and prevent erosion. Ducks Unlimited recognizes the efforts of our Louisiana advocates and our Oregon advocates' crops are certified as Salmon Safe. Others have been recognized by various local organizations.

They're all active in their communities and serve on multiple civic, environmental, and farm organization boards. In addition, they serve their neighbors through church and activities such as 4-H and FFA. While this is the most diverse group of 4R Advocates to date, they all farm with the common spirit of producing crops sustainably and making their farms better each year guided by sound science, including the 4R Nutrient Stewardship practices. Enjoy getting to know them.



Becks Lead Citrus Industry and Communities

Managing 7,500 acres of citrus over a seven-county area in central Florida keeps Glenn Beck, president, and Mark Beck, vice president, of Beck Brothers Citrus, Inc. on the go. Glenn manages administration of the farm and production management in its northern region and Mark takes care of production management in its southern region. The farm was founded by their father, George, who was fertilizer operations manager at a local co-op, so the pair learned firsthand the importance of fertilizers to efficient citrus production.

The 4R practices guide the approach that Rob Watson, sales consultant with Griffin Fertilizer Company, and the Becks follow when developing annual fertilizer application recommendations. They generally apply six, high-quality, dry granular fertilizer applications yearly, but their plan allows flexibility to adjust for weather and growing season changes. This reduces nitrogen application to just 27 pounds per acre and potassium to only 42 pounds per acre per application. Historically, growers would generally apply more than 200 pounds of nitrogen per acre per year. Beck citrus groves are enrolled in the Florida Department of Agriculture and Consumer Services Best Management Practices program.

Liquid fertilizer is injected into micro-sprinkler irrigation systems, which allows fertilizer to be applied to wetted root zones when needed, such as during a drought. If they use fertigation, they reduce the amount of fertilizer applied during the following dry application. Piggybacking on pest control sprays, the Becks are applying nitrogen, potassium, and micronutrients via foliar fertilizers.

BEST PRACTICE MANAGEMENT

- Use nitrogen stabilizer for liquid and dry fertilizers
- Use nitrification inhibitor to reduce in-field nitrogen loss
- Individual grove block sampled at tree drip line
- Variable-rate nutrient application
- Implement fertigation on irrigated acres to apply nutrients to the most productive areas of the field
- Use split application of nutrients so plants take them up more efficiently
- Use leaf tissue analysis as in-season nitrogen management tool
- 20 nutrients applied
- Plant tissue testing evaluates effectiveness of fertilizer program and is used as a diagnostic tool
- Foliar application of nutrients
- GPS-precision planting gets the right seed where it needs to go
- GPS-precision nutrient application avoids skips and saves on input costs
- Use satellite imaging to help identify yield potential and nutrient management plans

MEET THE ADVOCATES:



Growers:

Glenn and Mark Beck,
Beck Brothers Citrus, Inc.
Windermere, FL

Crop Advisor:

Rob Watson
Griffin Fertilizer Company
Frostproof, FL

