Arkansas Corn and Grain Sorghum Promotion Board Project Progress Report - Arkansas Discovery Farm November 11, 2014 Submitted by Mike Daniels

Summary: The Arkansas Corn and Grain Sorghum Board granted \$5,000 in 2014 to the Arkansas Discovery Farm Program. The Arkansas Discovery Farm program is currently collecting water quantity and quality data from both inflow from rain and irrigation and in outflow as runoff from five row crop farms, one in Arkansas County near Stuttgart (Corn, rice and soybeans), one in Desha County near Dumas (Cotton and Corn), one in Pope County near Atkins (dry-land wheat and soybeans) and two in Cross County near Cherry Valley (Rice and soybean).

Discovery Farm Progress: In 2014, we initiated edge-of-field runoff monitoring on 8 soybean fields, 3 cotton fields, 2 corn fields and 1 rice field. In the two corn fields, we are also monitoring irrigation water use and soil moisture. In the Desha County field, we are also monitoring evapotranspiration with an atmometer to schedule irrigation. To look at the effect of fertilizer placement on nutrient runoff, fertilizer in half of the Desha County field was incorporated while the other half was broadcast.

We have conducted several tours on Discovery Farms and they are listed in the Table below:

Tour	Date	Attendees	Discovery Farm
US Senator Boozman Ag. Tour	August 2011	20	John Maus Farm - Atkins
NRCS Chief Jason Weller Tour of Arkansas	August 2012	50	Mike Wood Farm - Cherry Valley
Arkansas Congressional Staff Delegation Tour	September 2013	20	Savoy Poultry Farm
United Soybean Board Sustainability Committee Tour	September 2013	20	Mike Wood Farm - Cherry Valley
National Association State Conservation Administrators	October 2013	50	Savoy Poultry Farm
National Forage & Grassland Tour	April 2012	50 from around the country	Jeff Marley Farm - Elkins
Northeast Arkansas Water Resources Tour for the Joint Agriculture Committee of the State Legislature	July 2012	65	Mike Wood Farm - Cherry Valley
Multi-State Discovery Farm Tour	September 2012	25 including visiting scientists and Discovery Farm Stakeholders from North Dakota, Wisconsin, Minnesota, Missouri, Tennessee, Arkansas, and Louisiana	Steve Stevens Farm - Tillar and Terry Dabbs Farm - Stuttgart
Wal-Mart Sustainability Tour (conducted by the Division's Center for Agricultural and Rural Sustainability)	June 2011	80	Jeff Marley Farms - Elkins
Northwest Arkansas Tour Joint House- Senate Ag Committee	June 2011	90	Jeff Marley Farms - Elkins