Transcript of the furrow diking Video from the Georgia Farm Monitor, 2008

(Denny Moore - Host, Georgia Farm Monitor)
The USDA ARS National Peanut Research Laboratory in Dawson, Georgia, is now in its fourth year of research using furrow dikes in both irrigated and non-irrigated peanut, cotton, and cornfields. Georgia Farm Bureau President Zippy Duvall and a Monitor TV crew decided to go to the southwest Georgia lab, and were pleasantly surprised by the research being done there.

(Russell Nuti - Research Agronomist, National Peanut Lab)
We rely on rainfall and we use irrigation as a supplement to rainfall. So if we were better at capturing rainfall we can hopefully irrigate less which will help us to conserve resources and money of course.

(Moore)
Capturing and conserving the water is what furrow diking can do. Although it's new to the southeast it's a proven practice in parts of the western U.S. and around the world. Equipment necessary for installing furrow dikes is not expensive. It's a simple idea which is adaptable to almost any row crop tillage system.

(Nuti)
The way that it works is as you drive forward through the field the cultivator loosens up the soil and the diker takes that loose soil and creates a series of basins and dams.

(Moore)
The diking paddle creates the furrow dikes, it accumulates loose soil. This causes resistance and will lift the whole diking paddle frame. As it lifts, the angle of the blade changes and as soon as it catches on firmer soil, it will cause the paddle to flip and will start making the next dike.

(Nuti)
What we see is that there is a good size area for water capture and this is higher than the row so it's going to act as a dam and hold any run off at least to that point. Plus, with this tillage pass we've run a shank down the middle to open up the soils down below this whole system.

(Armond Morris - Georgia Peanut Commission Chairman)
Furrow diking, if it will help reduce the number of irrigations that you have to put irrigation, last year it cost $12.00 an acre and I would suspect it'll cost $15 to $16 an acre this year according to if you've done anything it improve your system, so if it will save one or two irrigations you can see right off you could save $25 an acre.

(Nuti)
We have done rainfall simulation studies and seen up to 300% difference in water capture and also 300% reduction in erosion because were holding the water at the location that it falls instead of letting it turn into mass flow and letting it run off the field.

(Moore)
In 2007, which as you know was a very severe drought year, they were able to save five irrigations in cotton using the same type of irrigation schedule which tells us this system is helping to capture irrigation far more efficiently. The technology has the potential to stabilize crop yield and quality.

(Zippy Duvall - Georgia Farm Bureau President)
We're seeing an example here where their conserving not only the soil, but conserving water too which is the most precious resource we have. We as agriculture have to think in those terms because the perception that the public has of us is that we're wasteful people and we're not a wasteful industry. And we're striving each and every day to be better at conserving our water and our soils.

(Moore)
If you would like to find out more on how to improve water conservation through furrow diking, call:

Russell Nuti at (229) 995 - 7449