Subsurface Drainage Demonstration At Bradford Farms, Aug. 21 And 22

COLUMBIA, MO.

producers in Missouri struggling to get their planting done. That has sparked increased interest in subsurface drainage, which lets fields dry faster and helps producers complete planting in time, even during wet years.

On August 21 and 22, producers and crop advisers can see demonstrations of tile drain installation at two field days at the University of Missouri's Bradford Research and Extension Center (BREC).

The field days, originally scheduled for July, have been postponed because, appropriately enough, the soil at the demonstration site needs more time to dry.

"This year has been a great example of the impacts of excessive water on crop establishment, fertilizer loss and soil loss associated with surface-water runoff," said University of Missouri agronomist Kelly Nelson.

"We want to emphasize the importance of good soil conditions during the installation process and look forward to more favorable conditions in August," he said.

For farmers who are all too familiar with waiting for more favorable soil conditions, subsurface drainage can help prevent a repeat of this year's delayed planting.

"Many fields in Missouri have subsoils that restrict water flow, pond water and dry slowly," said Peter Scharf, MU Extension nutrient management specialist. "Subsurface drainage can greatly reduce the time from a saturating rainfall until field operations can begin."

Research by Nelson has shown that installing subsurface drainage can substantially increase corn and soybean yields compared to nearby non-drained plots.

"Those yield benefits are worth a lot more dollars now than they were a few years back," Scharf said. "Drainage gives the crop a better early-season environment, especially in wet springs, by reducing seedling disease, oxygen deprivation and stand loss. It also increases soil temperature, getting the crop off to a quicker start."

The Missouri Land Improvement Contractors Association is co-sponsor of the event, which will feature the same program on both days.

Speakers include Nelson, who will give a presentation on drainage and sub-irrigation research; John Hester of the USDA's Natural Resources Conservation Service, who will talk about drainage survey and design; and Eddie Hoff, who will provide a producer's perspective on drainage performance.

Members of the Missouri Land Improvement Contractors Association (MLICA) will demonstrate all stages of the drainage installation process, including the use of specialized installation machinery. MLICA members are also donating labor, materials and equipment use to MU. "We really appreciate the drainage industry stepping forward to help us install a facility for studying the effects of drainage," Scharf said.

There also will be demonstrations of drainage control structures, which make it possible to use drainage lines for sub-irrigation. "For producers with limited water, this option will probably deliver water more efficiently than a pivot," Nelson said.

The field day runs from 9:30 a.m. to 3 p.m. both days (August 21 and 22). Lunch will be provided to the first 100 people to apply for a lunch reservation on each day. To apply, send e-mail to hubbardv@missouri.edu (include "lunch" in the subject line and indicate which day you are attending) or call 573-884-7945 and ask for Thresa.

For certified crop advisers, 4.5 soil and water management CEUs have been applied for.

See http://aes.missouri.edu/bradford/contact.php for driving directions. Δ