-- Post-Harvest Review

New Tools — Old Wisdom

MOLINE, III. — Efficiency, control, and accuracy are virtually cliches around the corporate water cooler, but the themes of good business ring as true in a farm field as they do in an urban business park. Some of the latest equipment to hit the market takes these corporate buzzwords to new levels.

Typically, gaining efficiency means sacrificing control and accuracy to a certain extent. But John Deere recently unveiled several new products that it says accomplish all three goals.

One of these products is the 2700 Mulch Ripper, which mulches with a disk, shatters with a ripper, and levels soil with a conditioner — all in one pass. Performing multiple field operations on a single pass saves fuel, limits hours on equipment, reduces soil compaction, and perhaps, most importantly, saves time.

John Deere Tillage Division marketing manager Matt Weinheimer said the new mulch ripper tool is flexible as well as efficient. "This tool allows growers to adjust their tillage for specific field conditions and precisely control the amount of residue left behind."

In addition to improved efficiency, new tillage tools offer options to greatly improve the control of the tool and the depth of tillage. Automatic implement control systems take the guesswork, and cost, out of field operations, allowing farmers to adjust implements from the tractor cab — all with the touch of a keypad.

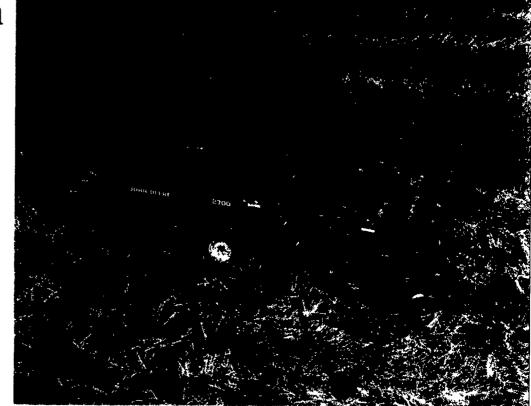
"The ability to adapt to changing field conditions onthe-go by accurately controlling tool depth from the cab helps the operator manage soil moisture reserves and increase operating speed and efficiency," said Weinheimer.

The new 2400 chisel plow from John Deere combines depth control technology such as AccuDepth, a floating hitch and TruePosition cushion standards in one piece of equipment. The AccuDepth system's in-cab digital display shows the depth in inches for each frame segment and provides automatic, on-the-go correction for primary and intermediate chisel depths and side-to-side leveling.

New electronics also play a role in tillage accuracy, because though some people are blessed with an inherent sense of direction, most everyone else could use a little guidance. In addition, even the best driver can get a little off track after hours in the cab. That's where parallel tracking guidance systems can make a difference.

Parallel tracking systems use GPS signals to keep a tractor on course throughout a field, reducing passes and saving time and money.

According to Terry Porter of John Deere's Agricultural Management Solutions (AMS) group, John Deere machines utilize the StarFire



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GPS receiver to support parallel tracking, helping the operator — through both visual and audible signals — maintain a perfectly straight path

relative to the first pass down the field.

"Using this system, operators can apply fertilizer or chemical day and night without worrying about skips and overlaps. Or they can hook up the widest implement and drive straight down the field without having to constantly pivot in the seat to check the tool's position," said Porter.

Fall Tillage Promotes Good Soil Management

MOLINE, Ill. — Fall soil management using proper tillage techniques can reap significant benefits when spring rolls around.

Generally there are three

objectives for fall tillage programs, said John Deere tillage division marketing manager Matt Weinheimer: (1) eliminate compaction, (2) enhance incorporation of nutrients and chemicals, and (3) manage surface residue.

"Fracturing the upper soil layer in the fall promotes water and nutrient infiltration and facilities root penetration, and mechanical incorporation promotes uniform and efficient distribution of residues and nutrients," said Weinheimer.

When selecting a primary tillage tool, Weinheimer suggests that producers consider several factors, including soil type, residue preference, conservation tillage requirements, and tractor power. face, which is ideal when you want to leave the surface rough to absorb moisture or warm the soil," said Weinheimer. "With adjustments and optional attachments, you can control the amount of residue left in place after the tillage pass."

To limit soil compaction and enhance operational efficiency, Weinheimer recommends using a combination tool such as the John Deere 2700 Mulch Ripper, which mulches with a disk, shatters with a ripper, and levels soil with a conditioner — all in one pass.

"This tool does three jobs in one pass and gives the operator complete control of the soil profile. It mulches using fully adjustable disk gangs at the front. The ripper standards maximize soil-fracturing and enhance residue flow, and the rear disk conditioner provides soil leveling and optimal residue sizing," said Weinheimer.



Noninversion tillage tools such as disks, chisel plows, mulch tillers, V-rippers, and disk rippers offer the most flexibility.

"These tools are designed to till deep, but disturb as little as possible on the sur-

