

News release

## Soil Building Boosts Yields, Cuts Costs

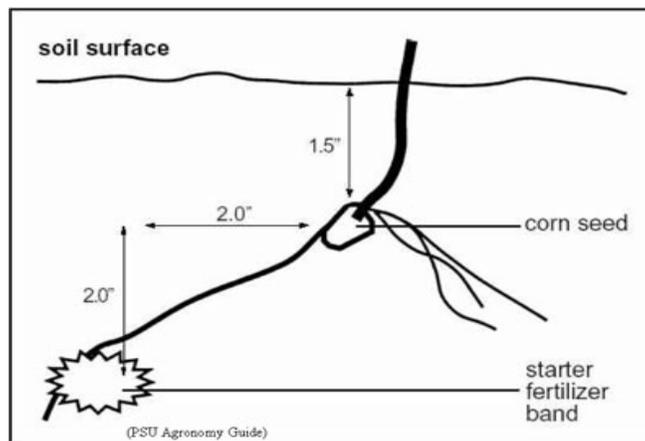
Modern technology, Careful Management and Cover Crops are Key

Cover crops continue to gain in popularity, although statistics would say that most Midwest farmers are still engaged in conventional tillage practices. National and regional conferences and field day demonstrations are changing that dynamic quickly.

Indiana-based Cameron Mills is among the early converts, having converted to no-till and cover crops years ago. While annual ryegrass has been a standard cover crop in his corn/soybean rotation, he's now trying cover crop mixes and likes what he sees from mixing annual ryegrass with crimson clover.

Modern navigational aids on equipment is making Cameron's work more precise and thus more efficient. He tests his soil regularly and knows which areas are high producers and which are not. And with GPS equipment engaged, he can fertilize based on the needs. "We're gaining maximum profits out of the nutrients we're putting on," he said.

Cameron has an all-steer fertilizer cart behind his corn planter. While planting corn, he lays down a band of nitrogen (28% by weight), in a furrow 2 inches from the seed drop and 2 inches deep (see diagram below). His initial rate of application is 30lb of nitrogen/acre. Cameron comes back later with a side-dress of nitrogen 28.



Information from soil tests and crop production also allow him to increase or reduce inputs. In recent years, he said he's been able to reduce application of phosphorus and potassium (P & K) largely because of his use of cover crops. "I've also begun to lower the rate of nitrogen, too, but I'm being very careful about how much and where. Farmers are increasingly using labs in the Midwest to test corn stalks for residual nutrients, principally nitrogen. Comparing that data with input data allows farmers to adjust inputs accordingly.

"I'm more able to build up the fertility in low production areas and saving by reduce fertilizer in areas that don't give you any added response," he continued.

When rotating soybeans and corn, Cameron said he's seen a five bushel increase in soybean yield after having annual ryegrass as his cover crop. "Annual ryegrass seems to break the disease cycle of the soybean cyst nematode," he added.

Last year, he began trying a mix of cover crops. "I'm not talking eight or 10 or 12 different cover crops; rather, I've mixed annual ryegrass and clover and they seem to do very well together." For one thing, clover is a nitrogen provider and annual ryegrass is able to store a lot of nitrogen. In the spring, weeks after the cover crop has been sprayed out, the annual ryegrass residue is decaying and releases nitrogen just as the corn plant is needing a boost. "Cover crops are a win-win proposition in that respect," Cameron said.