

# Rod's Path Leads Upward

by Matt Hagny

Since the Dec. '04 issue featuring Rod Peters of Hillsboro, KS, some aspects of his operation have gotten simpler, and some more complex. Yet, overall, he's been reaping the rewards of prudent management and in staying the course on his no-till path.



Comparing his first 5 years of no-till ('96 – 2000) with the past 5 years, Rod's yields have risen dramatically—by nearly 20 bu/a—for corn, wheat, and soybeans. But not for milo, he hastens to add. Rod also knows, via his crop insurance agent, that his yields are uniquely high for his locale. This is quite an accomplishment, given that Rod farms some of the worst soils in the area (everyone likes to claim this title, but in Rod's case it's true), with 80% of his cropland comprised of extremely thin, clayey soils—20 or 30 inches—overlying limestone. What's carried his yields to much higher levels during the past 15 years has been an increase in soil OM from ~ 2% to ~ 3% in the upper 8 inches (same lab, same methods, same fields, same depth, and lots of data). Rod says, "I'm quite pleased with this improvement. The soil is getting healthier, with better water-holding capacity. When the soil OM can be increased, a lot of problems are solved."

Rod notes, "I'm getting higher yields, but I'm pushing more fertilizer to get there." Yet, it's been a huge financial boon in recent years. "My goal is the highest profitability [while being sustainable], not necessarily maximum yield," referring to his intrigue with the concept of cover-crop 'cocktails' perhaps allowing some reduction in fertilizer needs over the long-term.

"One thing I've learned is: Don't do cover-crops as a monoculture. . . . Cover-crop *cocktails* are a beautiful way of increasing soil OM, plus bringing nutrients up to the surface and making them available to future crops." Towards that end, Rod continues to dabble with summer/fall cover crops on small acreages of wheat stubble slated for corn or milo the next year (most of his 2d-year wheat stubble goes to double-crop [dc] soybeans). In '08, he planted a cocktail in late July, consisting of mung beans, sudan, cowpeas, sunn hemp, and red clover. Rod is quite pleased with the subsequent corn yields in '09 and 2010.

"I've seen the benefits of cover-crop cocktails in the following crops. But I haven't been bold enough to try reducing fertilizer rates." Rod observes how much faster his mulch decomposes nowadays—even 140-bu/a corn stalks—compared to the early years of no-till, "so cover crops become more important."

Some things haven't changed, such as Rod's basic rotational scheme of soybeans >>wht >>wht/ dc soys >>corn (or milo) >>corn (or milo). Sometimes, dc milo substitutes for dc soys, but one rule is absolute: "I never plant corn into milo stalks." Plus, he's evaluating new options for double-crops, always eager to try a few "crazy" things.

Rod's seeding equipment has been updated, and simplification now reigns: In '96, his planter had row cleaners, but none are on his cur-

rent 12-row White—and he's quite satisfied (at his latitude, heavy residue poses little problem). Also omitted are side-band fertilizer openers—although Rod still applies all his fertilizer with the planter for corn (and now for milo, too), it's as a *surface* stream of liquid behind the closing wheels. While 10-34-0 and some micronutrients go through the Keetons, a separate system handles the N + S + P + Cl side-band mix. Additional

micros often go out with herbicide for corn & milo. For wheat, Rod runs pop-up on his JD 1590 drill, and broadcasts dry fertilizer in March, although first-year wheat also gets a shot in the fall. Boron is sprayed on all wheat

acres in the fall, often with carefully chosen herbicides for henbit control. While the more nuanced fertilizer program does increase complexity a bit, Rod is ecstatic about his crop yields since implementing it.

While Rod's herbicide plans are more complex than 6 – 8 years ago, they're nothing new in the big scheme, since Rod was nimble with chemistries other than glyphosate back in the mid-'90s. The return to old ways has partly been forced by glyphosate-resistant marestail, but Rod is also leery of the potential for glyphosate soil/root carryover (see the Fall 2010 issue). Rod acts accordingly, by going to more non-RR crops, as well as planning pre-plant 'burndowns' more carefully. Yet Rod doesn't shrink from the task, realizing that his attentiveness has paid off nicely in the past. 🌱

**Rod: Big yield gains with continuous no-till and attention to detail.**