Precision Manure Application
Evolved to Specialized Career for Farmers

Jonathan Koop has farming in his blood. “I grew up on a farm right here in Butler County, and I can’t imagine living anything but a rural lifestyle,” said the Aplington, Iowa resident.

Full-time farming, however, was not initially in the cards for Koop when he finished his schooling. Instead, he started a trucking company, hauling cars, freight and pigs—including for Iowa Select Farms. Then, five years ago, he had the opportunity to sell the business and get back closer to his farming roots.

He now contract-hauls manure with business partner Brad Feckers, who farms several thousand acres in the area. He also owns a custom-baling business and contracts with Iowa Select Farms to mow the grass around five farms.

All hands on deck

During application season, Koop and Feckers employ 12 individuals in addition to themselves. “A lot of fellow drivers from the trucking company followed me to this business,” said Koop. “We are fortunate to have excellent, loyal workers and very little turnover.” Their crew ranges from high-school students to a woman in her 70’s who runs a pump station.

The operation pumps, hauls and injects manure for about two weeks in the spring and three months in the fall. “It’s a schedule much like crop farming,” said Koop. “We know we will be slammed in the spring and especially the fall, and work our lives and other ventures around that schedule accordingly.” They run four Houle manure tanks—two that hold 7,300 gallons and two that hold 9,500 gallons.

In-season, the crew works 12-hour shifts and runs 24 hours a day, 7 days a week, weather permitting. Part of their caravan of equipment includes a traveling camper “bunkhouse,” where workers sleep in their off hours. Because they run at night, Koop is highly mindful of safety. Equipment lights are meticulously maintained and cleaned, and all of the manure rigs are equipped with integrated brakes on the tanks, so the tanks stop when the tractors stop. Drivers are not allowed to talk on their cell phones, but have use of private-band, two-ways radios to communicate with one another.

A farmer’s perspective

Koop’s farming background serves him well in his role as a deliverer of soil nutrients. “We never spread a field until I have communicated directly with the farmer,” he said. “We follow the prescribed application rates, and wait until soil conditions are right for application.”

Every tank is equipped with a custom-manufactured no-till bar, which Koop said fits into virtually every farmer’s agronomic program. “They can follow us with more tillage if they want, or use a no-till program after we apply the manure,” he shared. The rigs also are fitted with Raven Rate Control Modules and ISOBUS Product Control Nodes to ensure even manure application. This system ensures a standard, 6-inch injection depth. “A roller rides over the ground indicates to the driver the need to adjust the pressure relief valve to keep the application depth consistent,” shared Koop. “It’s a very high-tech system, but at the same time is simple to operate.”

Koop and his crew also are more than willing to navigate terraces, back into odd corners, and otherwise go the extra mile to ensure fields are covered evenly and nutrients are delivered to the entire crop. “The job we do directly impacts the farmers’ yields and ultimate success, as well as the environmental and aesthetic impact of utilizing hog manure,” said Koop. “It’s a responsibility we take very seriously.”