Jim Batts restored two Allis WD45s and used them in the "Double Header" he built to replicate the setup his grandfather made more than 60 years ago.

He Re-Created His Grandad's "Double Header" Tractors

By Contributing Editor Lorn Manthey

"My granddad farmed more than 1,000 acres back in the 1950's and hooked two WD45 Allis tractors together to create what he called a 'Double Header' tractor," says Jim Batts of Lizton, Ind. "I was a kid when he did that and decided a few years ago to re-create his idea."

He bought two old WD45s and got them both running well. Then he built a hitch to connect the two tractors, cleaned everything up and painted the double tractor rig so it looks brand new. The project took him nearly three years, but he says it was more fun than work.

Batts says his grandfather built his Double Header because he wanted to make his farming operation more efficient. "Two guys driving two WD45s pulling two 3-bottom plows got a lot done, but one guy driving the tandem setup pulling a 5-bottom plow was more efficient," Batts says. "He built the tandem by removing the front wheels from one tractor and building a sturdy hitch that mounted on the drawbar of the other one. He bolted the hitch pulling the rear tractor to the front one so both tractors pulled in unison."

Batts says the operator rode on the front tractor and controlled both of them with levers for the clutches, throttles and hydraulics. He re-created his same way. "The driver put both tractors in the same gear before he drove, then he'd engage the clutches at the same time, regulate the speed with the throttle lever and the hydraulics with the other lever. He always had to be concerned about throttling down the back tractor at the end of a field, so it didn't push the front one while turning."

The setup worked so well that Batts' grandfather built two more just like it. Each team would plow, pull a 16-ft. wide disk made from two 8-ft. disks or a 4-row planter made from two 2-row units. Batts says "he'd separate the tractors after spring plowing and planting and use them for cutting, raking and baling hay, cultivating, and pulling his three Allis combines during harvest. Unfortunately, he was killed by a drunk driver in 1960 during his farming heyday."

Batts says his dad and uncle took over the operation and continued using the Double Headers. They even teamed a D19 Allis with one of the 45s to pull an 8-bottom plow in the late 1960's. In 1974 they bought a "factory-built" 4-WD 850 Versatile that Batts says is still running today.

"Grandpa was a hard-working guy and a great mechanical mind who rebuilt a lot of machinery," Batts says. "Even with his large acreage he never owned a pickup, but he'd get a new car every year. He'd take the back seat out of his car and use that space to haul parts, seed, fuel and supplies around the farm. The seat only went in when the family went to town."

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Patented Forage Fights Parasites

AU Grazer is an all-natural dewormer, in the pasture or the bag. It was developed by Auburn University from Sericea lespedeza, a plant species often considered a weed. AU Grazer fixes nitrogen in the soil and reduces the parasite load in sheep, goats and cattle. It can be grazed, baled or bagged for sale as a feed supplement.

"You don't have to feed it every day to prevent worms," says Tom Sims, Sims Brothers. "If your herd or flock has parasites, just feed 2 percent of body weight per day. It will clear up stomach worms like the barber pole worm and control coccidia."

Sims remembers when the legume was called the poor man's alfalfa. Today his family's seed business is the licensed dealer for the patented AU Grazer and the only certified seed producer. While most of their acres are devoted to seed production, they graze their own cattle on it. The remainder is baled up as young plants or the leaves are harvested later in the season with a specialized combine.

"At about a foot in height, it makes high-quality hay," says Sims. "It's as high in protein as a lot of our grasses. As the plant matures, the leaves to stem ratio changes, and we harvest just the leaves. We cut the plants and windrow them to dry. Then we run them through our modified combine."

The belt drive pickup feeds the windrow into the combine where the threshing action separates the dry leaves from the stems. Big fans mounted on the side of the combine pull the leaves out and blow them into a modified cotton wagon hitched to the combine.

"We lined the cotton wagon with a fine mesh screen to hold the leaves," explains Sims. "They are dumped into a pit and run through a hammer mill to grind them up. We mix them with molasses and pelletize them."

The molasses helps with the pelleting and makes the pellets more palatable for animals that have never tasted the plant. Sims explains that as the plant matures, the natural tannins increase. This gives the plant a bitter taste.

"Livestock only graze it in the spring when it is young and tender," says Sims.

Sims Brothers sells the pellets wholesale to Faithway Feeds and New Country Organics. They retail for $25 to $35 for a 50-lb. bag. The farm's biggest problem, according to Sims, is keeping up with demand.

Sims charges $5 per lb. for the seed and recommends a 20 to 25 lb. per acre seeding rate. The initial investment has a long-term payback with an expected 10-year life span. Getting it established is easy as well. He suggests planting it at about a 1/4-in. depth

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with a Brillion-type drill designed for small seed, noting that it is similar to alfalfa in size.

"It doesn't require a lot of fertilizer, and you can get 3 to 4 cuttings per year," says Sims. "If you cut it at the right stage, you don't need to take just leaves."

The Sims aren't the only ones selling the specialty forage at a premium. Langford Farms, Autaugaville, Ala., planted 300 acres of AU Grazer in 2013. They bought the seed from Sims Brothers. They sell small square bales of the hay for $8 from the field. They also graze their cattle herd on it, as well as grind the hay for custom feed blends that they sell to goat producers. They report customers driving several hours for the hay.

Sims reports at least two customers who are building pelleting mills of their own and others like the Lanfords who sell the hay.

"We have customers as far north as Pennsylvania and west to Missouri, but especially in Tennessee, Georgia and the Carolinas," says Sims. "We didn't think it would take off as quickly as it did. The demand increased overnight."

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Combine Operator Controls Auto-Drive Grain Cart Tractor

Omni Drive from Raven Industries lets combine operators control driverless tractors pulling grain carts. An Omni Drive-equipped tractor brings the cart to the combine and back to the field edge for unloading.

"The combine operator controls all the functions of the grain cart tractor remotely, except for starting the engine and starting the pto to unload," says Ben Voss, Raven Industries. "Once it's been started, the combine operator can put it in gear and control the throttle and the steering to drive it across the field."

Voss explains that the computer in the tractor uses a combination of the onboard cameras and radars plus the GPS location of the combine. The latter is automatically uploaded to the Omni Drive computer on the tractor to meet up with the combine.

The cameras, which are mounted to the front, back and both sides, combined with the radars ensure a safe journey. If any obstacle is detected, the tractor stops until the combine operator can evaluate the problem and initiate action. The system also ensures that standing crop is avoided.

Control is offered by a tablet-based interface. The user can set a field plan, establish staging locations, adjust speeds, monitor location activity and command the tractor pulling a grain cart to sync with the harvester.

"Once alongside the combine, it matches speed and maintains a specific distance, allowing the combine auger to unload," says Voss. "When the hopper has emptied, the Omni Drive equipped tractor returns to its starting point to unload. As an extra layer of safety, the pto for the cart's grain auger has to be activated by a person."

After several years of beta testing on customer farms, Omni Drive is available as a kit. It can be installed on a wide range of late-model tractors, including Deere 8R Powershift and IVT series (2010 to 2020), Case IH Magnum CVT Series (2014 to 2020) and New Holland Genesis T8 CVT Series (2014 to 2020).

While the current application is for these tractors and grain carts, Raven is working with other OEMs on additional tractors and implements.

"We're working to improve Omni Drive, its computer power and connectivity in areas with poor cellular coverage, as well as continuing to improve the cameras and their ability to recognize things," says Voss. "We're also looking beyond harvesting grain crops, to sugar beets, potatoes and vegetable crops."

One customer request that Raven is getting is for a less complex version that works with a driver in the tractor cab, automating some functions, but not all.

"Farmers want to be able to hire people, even without experience, to monitor them and to correct them if needed," explains Voss.

"Then, when they get to the combine, the combine operator takes over and syncs the tractor and grain cart with the combine."

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