# He Seeds Cover Crops While He Combines

Cover crops save the soil, crowd out winter weeds, and feed and protect the coming crop, says dedicated conservationist and no-tiller Ray McCormick. With his combine header-mounted, Gandy Orbit-Air applicator, he has eliminated the need to make a second trip to plant the cover crop.

"In the past we seeded winter peas with an 1890 Deere CCS air drill in a separate pass," says McCormick. "Last year we didn't get the Gandy unit put together until the third week of October, so we had fields seeded both ways. We got as good a stand with the Gandy as with the air drill. We will probably do 75 to 80 percent air seeding with the header this coming year."

McCormick had done plots using a hand seeder ahead of the straw spreader. They convinced him air seeding would work. However, the seed had to be placed under the residue for good emergence. That meant hanging it on the combine, and the only available place was on the header.

Mounting it was relatively simple. McCormick made a support frame on the backside of the rail header rail using 1 1/2-in. steel tubing. A piece of U-channel iron welded to the Gandy frame let him attach it to the rail with set screws.

"We ran the hoses behind the header and underneath the corn head's snapping rollers," says McCormick. "I tied the Gandy unit into excess ports on the quick connect unit for electric and hydraulic connections. When I pull the lever to disconnect the header, I disconnect the Gandy as well."

This year McCormick will be trying out a prototype low profile Gandy applicator. It will allow him to mount it to the grain platform and reverse the hoses to come out the back. It will also make it possible to open the top without interference from the grain reel.

McCormick notes that even if there was room for the Gandy unit to be mounted to the combine, it would require disconnecting up to 12 hoses from the header each time the header was changed.

The Gandy could be switched to another header simply by removing the set screws. However, McCormick figures his cost savings and the benefits of cover crops will more than justify a second Gandy unit.

"It will pay for itself in a year in time and energy," says McCormick.

He notes that using the Gandy does mean he has to use small seeded cover crops. Last year he seeded only annual rye with the Gandy. This coming year, he will plant annual rye, crimson clover and oilseed radishes on fields going into corn. Annual ryegrass and rapeseed will be seeded to corn fields going into soybeans in 2013. Plus, with the small seeds, he gets a lot more acres per hopper fill.

**Ray McCormick plants cover crops using a combine header-mounted, Gandy Orbit-Air applicator. "It eliminates the need to make a second trip to plant," he says.**

Large seeded or small, McCormick knows what a cover crop is worth. "Our state agronomist estimated cover crops saved about 50 bu. per acre during our drought and extreme heat," he says. "With our peas and grass cover crop this year, we made nitrogen at the rate of about a pound a day."

Contact: FARM SHOW Followup, Ray McCormick, 6751 S. McCormick Rd., Vincennes, Ind. 47591 (ph 812 881-7321; mccfarms@myechowireless.com).

**Air hoses emerge over a right angle splash plate that spreads the seed out.**

# He Uses Detassler To Seed Cover Crop

Nick Renner turned a used detassler into a cover crop seeder. Renner is a longtime no-tiller who recently got interested in the benefits of cover crops. Combining the detassler with a used Gandy air seeder was a low cost way to experiment with getting a cover crop started in standing corn.

"I figure a good nitrogen-producing cover crop could reduce inputs by $150 to $200 per acre, once we get things worked out," says Renner. "If we can plant in-crop, we can pick up a month to 6 weeks of growing time in the fall."

Until he retired a few years ago, Renner ran a farm for his religious order, the Missionaries of the Precious Blood. He and a co-manager had converted the farm to no-till by 1985. Though it's now rented out, Renner still oversees it and requires that it be no-tilled. He sees cover crops as a way to cut costs and help the soil.

"Cover crops put starches and sugars into the soil all winter, feeding the bacteria and fungi in the soil," he says. "Cover crops let us mimic Mother Nature."

To make his seeder, Renner took the 6-row corn detassler, which straddles 3 rows, and added 2, 3-row wings to it. He mounted a Gandy air seeder and routed drop tubes between rows.

The first year, he retained all cutting heads and cut the cornstalks above the ears as the kernels were entering the black layer stage.

"The top of the stalk isn't needed at that point," he says. "The idea was to open up the rows so more light would get down for cover crop germination. This past year, I clipped only three rows in cooperation with Ohio State University researchers to evaluate the effect on corn crop dry down."

Both years were frustrating for Renner. Fall 2010 was dry, and harvest was early enough that there was limited advantage from in-crop seeding. The dry weather reduced or prevented germination until the following spring. Fall 2011 was wet and cold, delaying entry into fields pre-harvest.

"I think a more average year would produce better stands," suggests Renner. "This year some stands came up perfectly; some were just good. We're still learning."

**Nick Renner turned a 6-row corn detassler into cover crop seeder (left). It's filled with a Gandy air seeder.**

The diesel mechanics class at a local school is overhauling the engine for Renner in preparation for seeding this fall. They are also rebuilding the manifold to allow Renner to eventually expand the machine to 24 rows. He is unsure how many rows he will clip in the future.

"If we were to clip 12 rows or more, we would need a larger motor," he says.

Renner estimates he has about $6,000 invested in the machine at this point. He hopes to do a year or two more of testing, noting that others have already picked up on his concept and built even bigger and better seeders.

Contact: FARM SHOW Followup, Brother Nick Renner, 229 W. Anthony St., Celina, Ohio 45822 (ph 419 852-2917; nrenner@celina-ic.org).

# Seed Bag Loader For Deere Air Seeders

Leighton Schappert has a better idea for loading seed into air seeder carts. His E-Zee Loader hydraulic arm lifts a platform loaded with bags from the ground or truck to the top of the cart. It saves time, energy and high value seed.

"With canola seed running $12 a bag for quality seed, you don't want to break or drop a 50-lb. bag as you carry it up the steps to the walkway," says Schappert. "Add in the time factor and the fact that some of us farmers aren't getting any younger, and you see why guys are looking for faster and easier ways to load seed."

The E-Zee Loader uses the existing auger hydraulic outlet on air carts. The bolt-on brackets require no welding, cutting or other modifications of the cart frame. One cylinder controls up and down.

"The parallel linkage keeps the platform self-leveling," says Schappert. "An average guy can install it in less than 6 hrs., depending on experience, facility and tools."

The elevator platform measures 36 by 54 in. and holds 11, 50-lb. bags (550 lbs.). Overloading could affect the frame.

Schappert is developing an illustrated guide for installers. The first models of the loading arm were developed for Model 1900 and 1910 Deere air carts. Brackets and kits are also being developed for other makes.

List price is $5,490 and includes all fittings, brackets and other hardware.

Contact: FARM SHOW Followup, Roadside Iron Works, Box 861, Langenburg, Sask., Canada S0A 2A0 (ph 306 743-5022; cell 306 743-7313; roadsideironworks@xplornet.ca).

**E-Zee Loader uses a hydraulic arm to lift a platform loaded with seed bags from the ground to top of air seeder cart.**