



Dan Batdorf needed a flatbed to use around his farm, so he bought an old FedEx semi tractor and fitted it with a 10-ft. long aluminum deck that fits over the 5th wheel.



When the 5th wheel or gooseneck hitches are needed, the flatbed deck drops down to allow access.

Semi Truck Fitted With Handy “Convertible” Flatbed

Dan Batdorf has the best of both worlds with his modified T300 Kenworth. The former FedEx semi tractor has a 10-ft. long, 8 1/2-ft. wide aluminum deck with 1-ft. tall sides for hauling equipment and supplies. When a 5th wheel is needed, the deck drops down to reveal it.

“We had been using an F-550 to pull our catering trailer, but it wasn’t big enough,” explains Batdorf. “I picked up the old FedEx truck for around \$13,000. It had a 9-speed

transmission and the 5th wheel, but I also needed a flatbed to use around the farm.”

To serve both purposes, Batdorf worked with a local welder to fabricate a deck that fits over the 5th wheel. He also added a gooseneck ball behind the 5th wheel.

To mount the bed, they bolted three 14-in. lengths of 3 1/2-in. square tubing to each side of the frame. A 6-in. wide plate welded to tubing runs the length of the deck on the underside. Two holes in the plate and single

holes in each upright make bed adjustment possible with bolts connecting the bed to the frame.

When the fifth wheel is needed, bolts are removed from the lower holes in the plate, the deck lowered, and the bolts replaced through the upper holes. This lowers the deck enough to clear the fifth wheel and the gooseneck hitch.

When the deck is needed the process is reversed. Portable jacks are used to raise the

bed level, just clearing the fifth wheel and the gooseneck ball. A solid plate fits over both.

To make the unit even more versatile, he added a heavy-duty bumper. “The bumper hitch lets me pull trailers and farm equipment,” he adds.

Contact: FARM SHOW Followup, Dan Batdorf, 9291 N. St. Rt. 48, Covington, Ohio 45318 (ph 937 418-2532; dtbatdorf@yahoo.com).



Zip Bandit is a heavy-duty zip tie with a piece of rubber tubing at one end.



As it’s pulled tight, the rubber tubing stretches around the scrotum.

Zip Bandit Makes Castration Quick, Easy

No expensive tools are needed to apply Zip Bandits to bulls or other animals needing castration. Just pull the Zip Bandit tight and wait for the testicles to drop off.

“We’ve used them on bulls from 250 to 800 lbs.,” says Brian Kuperus, Zip Bandit. “It takes about 4 weeks to work on smaller animals. Perhaps because of the weight, the testicles of larger cattle take 2 1/2 to 3 weeks to drop.”

Kuperus credits his wife for the original idea. The couple raised a handful of cattle for her to practice on with her sorting horse. Some bull calves needed castrating.

“She said, ‘Why don’t we use a zip tie?’” recalls Kuperus. “I explained that you needed a strip of rubber attached to the zip tie to pull tight so it would cut off circulation and slowly cut through the tissue.”

They quickly realized such a device would work and spent the next several years perfecting it and now have a patent pending. The Zip Bandit can best be described as a heavy-duty zip tie that is broken near the head. A length of rubber tubing is fastened to both ends of the breaks.

The Zip Bandit lead is passed around the scrotum and fed through the head. As it is pulled tight, the rubber stretches around the scrotum.

“We just started to market it in August and sold several hundred in the first month,” says



Kuperus. “We’ve had a 100 percent success rate with cattle.”

When he showed the device to his local vet, the ease of use impressed him. He says his customers appreciate not having to buy a tool to apply the bands.

“Tools can cost from \$30 to \$300,” says Kuperus. “With the Zip Bandit, you can get as few as 10 for \$30 to try out.”

The Zip Bandit is available direct from the company in larger quantities as well. A packet of 25 is priced at \$56, and a packet of 50 is priced at \$125.

See the Zip Bandit being put to work at FARMSHOW.com.

Contact: FARM SHOW Followup, Zip Bandit, 2510 22nd St., Hopkins, Mich. 49328 (ph 269 680-5414; info@zipbandit.com; www.zipbandit.com).



Greenhouse has a 4-ft. deep crushed rock bed beneath a sloped greenhouse wall. Warm air is pulled down into rock bed and a fan pulls the heat out into greenhouse.

Greenhouse Designed For Minnesota Winters

A “Deep Winter” greenhouse designed at the University of Minnesota captures excess heat during the day, and releases it at night.

The greenhouse has a 4-ft. deep, insulated bed of crushed rock beneath a steeply sloped, south-facing greenhouse wall. An insulated rear wall helps to hold heat. The glazing is triple wall polycarbonate.

“The polycarbonate isn’t supposed to discolor over time or reduce light,” says Greg Schweser at the U of M’s College of Design Center. “We know there are cheaper designs, but we hope this is the most efficient and most durable, and hold heat better and longer than conventional designs.”

The warm air is pulled down into the rock bed where it disperses through perforated, double-wall, smooth interior drain tile. When the inside air reaches 38° degrees, a thermostat triggers a fan to pull heat out of the thermal bed via a second length of drain tile. It pushes it out through an exhaust manifold into the greenhouse.

The prototype 18-ft. wide by 24-ft. long

greenhouse has a material cost estimated at around \$14,000. Labor roughly doubles the cost.

The greenhouse could back up against another building or even into a hillside. However, the design calls for a stand-alone building that can take full advantage of solar energy. One market gardener built a version into a hillside with a root cellar behind it. They then pulled an old resort cabin into place above the root cellar for living space.

“A heated, lighted greenhouse requires high value crops to recover costs,” says Schweser. “This design is intended for cold weather crops that will thrive in a greenhouse without supplemental lighting and with minimal supplemental heat.”

Contact: FARM SHOW Followup, Greg Schweser, University of Minn., 411 Borlaug Hall, 1991 Upper Buford Circle, St. Paul, Minn. 55108 (ph 612 625-9706; schwe233@umn.edu; www.extension.umn.edu/rsdp/statewide/deep-winter-greenhouse/).