"Hog Panel" Livestock Hauler

With small livestock on a small hobby farm, Doug Darnowski didn't want to spend a lot of money for a big trailer for the occasional times he needs to haul animals. So he came up with a confinement system made with a folded hog panel secured with U-bolts to a 5 by 8-ft. mesh floored trailer.

"The two ends of the panel are also secured with U-bolts," he adds. "We've used this to move animals a mile down the road or up to 1 1/4 hrs. away. You might lose a few U-bolts on a back road with a longer trip, but we just put a few extra on and have never had a problem."

He uses a couple of different materials for a "roof".

For active animals such as goats that jump, he uses a rope to secure a woven-wire fence top. The animals can also be tied in place on a lead.

"I bend the cut ends of the wire away from where the animals are," Darnowski notes.

For animals such as pigs, that don't jump around, a tarp secured with rope or tie downs works well for a top.

Folded hog panel is secured with U-bolts to a 5 by 8-ft. mesh floor trailer.

With U-bolts the temporary pen sets up and dismantles easily.

"It can hold six or eight young feeder pigs, two or three medium-sized pigs/mature potbellies or two or three Nubian goats," Darnowski says.

Contact: FARM SHOW Followup, Doug Darnowski, IUS, 4201 Grant Line Rd., New Albany, Ind. 47150 (ph 812 972-8590; Ddarnowski2@yahoo.com).

Michael Gresch added this pvc spray boom on back of a Bobcat utility vehicle. It's used to spray waste brine containing up to 10 percent salt.

Sprayer Boom Built For Utility Vehicle

By adding a pvc spray boom to the back of a Bobcat utility vehicle and cutting a 275-gal. water tank down to size, Michael Gresch was able to reduce salt usage for the city of Madison, Wis.

"I built it when the metropolitan sewage district for Madison asked me what I could do to reduce salt usage. We already had a 275-gal. water tank on the Bobcat for watering plants around U-Square, which is a mixed-use development with shopping, dining, and living in downtown Madison. I cut the tank down to 150 gal. so the driver can see out the back of the vehicle," says Gresch.

The middle part of the boom is attached to a heavy duty hitch made from a 1-in. receiver arbor. The boom is also attached to the back of the utility vehicle with J-type pipe hangers and 3/4-in. pvc pipe. Scrap wire links the J-hooks to the pipe and can be easily adjusted.

Gresch added a short 3/4-in. dia. pipe nipple, a 3/4 union, a 3/4 tee, a garden hose adapter and a short used machine washing hose to the boom. Waste brine is pumped through the hose and into the tank.

"The waste brine contains up to 10 percent salt. We fill the tank with a maximum of 100 gal. to minimize sloshing," says Gresch, who adds that the boom arms can be easily removed when the utility vehicle is needed for heavy duty snow work in winter.

Contact: FARM SHOW Followup, Michael Gresch, 324 N. Lake St., Madison, Wis. 53715 (ph 608 219-6754; mikegresch@hotmail.com).

Plastic Bags Keep Side Mirrors Frost-Free

If you don't have enough garage space for all your vehicles, frost or freezing rain that develops on the side mirrors can be a problem. Gary Swensen of Yankton, S. Dak., came up with a no-cost solution.

"Whenever I know snow or freezing rain is coming, I cover the cabs of our pickups that sit outside with a small tarp. It works great, but the side mirrors still get frosted up and I have to scrape them. One time I accidentally scratched a mirror with a cheap scraper, and that's when I decided to use plastic bags to cover the mirrors and tie them with the bag handles. The bags come right off when I need to hit the road."

Tied at the handles, plastic bags cover vehicle's side mirrors to keep them frost-free.

Contact: FARM SHOW Followup, Gary Swensen, Yankton, S. Dak. (g_swensen@msn.com).

Emergency Well Tube

If you can tie a secure knot and lift 8 lbs., Michael Mixon has a way for you to get water from your well when the electricity is out. He came up with the Emergency Well Tube after thinking about how he could get water in an emergency situation.

Mixon researched and found products that required removing the pump and wiring from the well casing. That didn't seem practical.

So he experimented with a variety of valves before settling on a float valve that's fitted to the bottom of three 2 3/8-in. dia. pvc pipes. The threaded pipes are screwed together, a rope is securely tied through two holes at the top, and the tube is lowered into the well. None of the mechanical components need to be removed or changed in the well casing.

"When it reaches the water, it fills from the bottom. When you begin pulling it up, the water and gravity seals the valve," Mixon explains.

All his testing was done on 6-in. dia. wells, but if there's 2 1/2 in. of clearance, the well tube also works in 4-in. wells, he says.

The tube holds about half a gallon of water. That may not seem like much, Mixon notes, but most people can repeatedly lift 8 lbs. and not be worn out like they would with heavier loads.

On his website, Mixon has a video and explanation of how to remove the well cap and use clean buckets to collect water and to store and wind the rope to avoid debris from getting in the well. Depending on the water and treatments required, the collected water can be poured through a water filter or boiled before it is used.

Mixon sells the Emergency Well Tube for $85 (including shipping) anywhere in the United States. Canadian and international sales are handled through an eBay link. Besides online orders, customers can place an order by mail or over the phone.

Emergency Well Tube delivers water from your well when the electricity is out. It uses a float valve fitted to the bottom of 3 pvc pipes.

Customers run the gamut from people in the suburbs that have wells to rural homeowners to preppers concerned about long term power outages.

Contact: FARM SHOW Followup, MBM Enterprises of VA, LLC, P.O. Box 20023, Roanoke, Va. 24018 (ph 540 632-0433; www.emergencywelltube.com; michael@emergencywelltube.com).

Scale Helps Reduce Crop Picking Disputes

Last year, cherry pickers at some orchards in Washington state knew exactly how many pounds of fruit they picked and that they were fairly paid for it, thanks to FairWeigh, an automated in-field weighing system.

Instead of judging whether a bucket is full for piecework pay, checkers oversee the process of weighing. Records are kept by the pickers scanning their RFID (Radio Frequency Identification) tags, which save all necessary data to an SD card.

"There is no estimation. With our system it doesn't matter if you have 1 lb. or 20 lbs.," says Dr. Mark De Kleine, a co-owner of MYM Technologies, which sells FairWeigh.

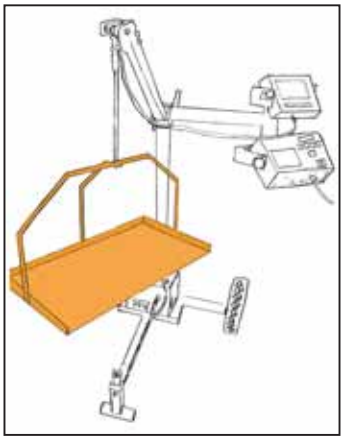
His partners, Dr. Matt Whiting and Dr. Yiannis Ampatzidis, developed FairWeigh as part of a four-year research project through Washington State University. De Kleine, an agricultural engineer, came on board to develop it into a marketable product in 2015.

The scale uses a hanging load cell mounted on a wheeled frame. The picker sets the bucket on it and scans his/her RFID badge across an antenna. The process takes as little as five seconds, De Kleine says.

Owners and pickers appreciated the system's benefits its first year. It eliminated disagreements between pickers and checkers about whether a bucket was full. Some pickers, who tend to slightly overfill buckets, saw increased wages. Keeping track of per pound pay versus per bucket pay is also more convenient for pickers. If they finish one tree and have less than a full bucket, they can dump it before climbing a ladder to start on another one.

As the name FairWeigh implies, the system ensures fair pay.

"In the field, we see that one unit works well with a crew of 15 to 20 people," De Kleine says. "More than that they have to wait in line."



FairWeigh, an automated in-field weighing system, uses a hanging load cell mounted on a wheeled frame.

FairWeigh won't replace checkers, he adds. They are still needed to oversee a crew and prevent fraudulent weighing. Using a scale is not a new idea, but the addition of gathering digital data makes the process faster and more efficient. Picking records are directly uploaded to the payroll program.

FairWeigh scales sold for about $6,000 in 2015. A revised model is available in 2016, and De Kleine says the goal is to cut the cost in the future and still maintain quality equipment that can be adapted for various terrains and crops.

Contact: FARM SHOW Followup: FairWeigh, P.O. Box 1410, Prosser, Wash. 99350 (ph 509 832-1108; www.fairweighs.com; mdk@fairweighs.com).