Bale Feeders Modified For Calves

By Michael J. Thomas

"Over the years we've had problems with young replacement stock – heifers and bull calves - climbing into our big bale feeders and needing help to get out. This has led to them getting hurt, and trouble for the people trying to help them. Also, timid animals got less feed than more aggressive ones and didn't grow to their full potential. Last fall we made modifications to our feeders that solved the problem.

"We considered narrowing the feeder stanchions to keep calves from climbing through, but the stanchions aren't wide enough to make this idea work. Also, it would have taken too much material and labor to make the idea cost effective.

"Then we figured out we could reduce the height of the stanchions by welding bars across them, just below the top of the feeder. We used 20-in. lengths of 3/8-in. rebar to do the job, welding 2 bars horizontally across each stanchion, 4 and 8 in. from the feeder's top rail. We used 2 bars to make sure a calf could never get its head caught between the rebar and the feeder's top rail.

"About \$15 in materials and an hour of welding later, we had successfully modified the first feeder. We used a battery-powered grinder with a cutting wheel to cut the rebar and clean up any sharp points.

"Then we returned the modified feeders to our replacement lot and loaded bales into them. To everyone's relief the young animals started eating the hay right away. The reduced height of the stanchions had no negative impact on their access to it.

"Three months later our heifers and bull calves are growing nicely, and not one heifer has climbed into the feeders."

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To keep calves from climbing into his big bale feeder, Thomas welded a pair of 3/8-in. rebars across each stanchion, just below the feeder's top rail.

Water Trough Tips Forward For Easy Clean-Out

"A friend with a large dairy farm wanted a new kind of waterer for his free-stall dairy barn, one that would have a lot of drinking space and also be easy to clean. Our 12-ft. long Water Master trough holds up to 200 gal. and tips up forward by hand for easy cleanout," says Ora Wengerd, Wengerd Machining & Fabricating, Bertha, Minn.

The trough consists of an 18-in. wide steel half-pipe supported by a steel frame that anchors to the barn floor. A tall horizontal bar on one side of the frame keeps animals from climbing into the trough. The middle of the trough contains a float valve where water enters the tank. A steel shaft runs under the trough and comes out through bearings at each end. The float and bearings are protected by steel covers.

The operator releases a latch at one end of the trough with one hand and grabs a long metal rod with the other hand to tip the trough forward. Once the trough has been cleaned out and tipped back in place, it automatically relatches. "Its size allows a lot more animals to drink at once than most other commercial tanks, and it's much easier to clean out," says Wengerd. "More drinking space results in higher milk production, especially in warm weather.

"Most farmers set the trough on the crosswalk along either end of the row of free stalls. Whenever the trough gets dirty with manure or feed, they grab the rod and tip the trough forward, then slosh the water in the trough back and forth and then tip the trough to dump everything out.

"It's built with off-the-shelf parts which can be replaced locally, if they're needed. But there just isn't much that can go wrong with this kind of water trough."

A standard 12-ft. long Water Master sells for \$1,100, but Wengerd says the troughs can be built to almost any length.

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Operator releases a latch at one end of trough and grabs a metal rod to tip trough forward. It automatically relatches when tipped back into place.

Pool Cleaner Converted To "Clear Water" Pump

"It works fast and delivers clean water even when pumping out of dirty ponds and creeks," says Wallace Browning, Buckingham, Va., who mounted the pump and canister filter off a commercial swimming pool cleaner on the rolling frame of an old pressure washer.

Browning operates a commercial swimming pool cleaning service and also owns a small farm with sheep, goats and horses. He uses the swimming pool cleaner on his own farm to fill stock tanks, and also to pump water out of local creeks and ponds for several neighbors who use the filtered, clean water in their row crop sprayers. He transports the unit on an ATV hauler that he pulls behind his van and carries a small generator and a 50-ft. extension cord with him to operate the unit.

"All my neighbors love it because they don't have to worry about cleaning out plugged nozzles on their sprayers all the time," says Browning. "The key feature is that the swimming pool cleaner has a big 10-micron filter which removes most of

the impurities in the water. It delivers much cleaner water than a gas engine-powered pump. The water comes out looking almost as clear as drinking water.

"It also works much faster than a gaspowered pump and will fill a tank at a rate of 45 gal. per min. It only takes about one min. to fill up a 50-gal. tank. I've used swimming pool cleaners for about 20 years so I know how they work. Commercial swimming pool cleaners are quite complicated, so to keep things simple and to save money I often buy various pool cleaner components individually and put them together. So far I've built 4 different swimming pool cleaners for farm use, and all of them can still be used to clean swimming pools."

He says the model shown in the photo is his simplest model and the one he likes best. "Last summer I decided to try filling sprayer tanks with it, and it worked perfect," says Browning. "My only cost was about \$10 for some plumbing fittings. Everything else on the unit was from salvaged or repaired parts.



Browning mounted the pump and canister filter off a commercial swimming pool cleaner on the frame of an old pressure washer. "The pool cleaner's big 10-micron filter removes most of the impurities in the water," he says.

"Once I back up to the pond or creek, I just hook up a 50-ft. long suction hose and a 25-ft. long, 1 1/2-in. dia. flexible discharge hose. Then I put the suction hose in the water, plug the extension cord into the generator,

and start pumping water," says Browning. Contact: FARM SHOW Followup, Wallace Browning, 3860 Oak Hill Rd., Buckingham, Va. 23921 (ph 434 996-8137).