

# Giant Calf Feeder Serves 45 At Once

By Janis Schole, Contributing Editor

Keith Marshall can feed a lot of calves with a minimum of effort using his big portable nursing station.

The Unionville, Virginia, dairy farmer designed and built the industrial strength rig for about \$4,500 in labor and materials. He was assisted by Sammy Altman & Son.

Marshall raises 150 calves per year. The big feeder allows him to keep the calves out on pasture.

"Other large-scale nursing stations use barrels to hold the milk, but none of them lets you make certain every calf has an equal chance to drink," he says. "This feeder keeps the milk away from the calves until I see that they're all in position. This is important because they're very competitive. It's sort of a mob situation."

Marshall's feeder holds 80 gallons of milk inside a 20-ft. section of 10-in. dia. pvc pipe. It'll feed 45 calves at a time.

The pipe hangs inside a trailer frame fitted with two large wheels. He tows it behind an ATV.

The open ends of the pipe are sealed by 10-in. expansion plugs that Marshall got from a marine supplier in Florida. He fills it through a T-spout at the front end.

The pipe rotates 180 degrees so the nipples can be held at the top of the pipe until calves are in position to nurse. Marshall installed the long row of nipples by boring in brass tees, each of which accommodates two nipples.

In all, the rig has 67 nipples spaced 7 1/2 in. apart (32 tees with three extra nipples aligned vertically).

Marshall sorts the calves into different paddocks, according to size and age. Each group of about 45 calves is fed separately.

"The calves are kept on a different farm from where we milk cows, so we transport the milk in 55-gal. drums and use a sump pump to load it into the nursing station," Marshall explains. "We park in a reasonably flat spot and then use a sight glass to level it, using a jack on the station. That way, all the nipples feed out an equal amount of milk."

As the calves start sucking, they create a vacuum. The rig includes a ball valve where Marshall can manually let air into the pipe. Once he's sure every calf has found a nipple, he uses the valve to release the vacuum and let the milk flow.

"We pour a few gallons of water into the pipe as the calves are finishing the milk, and they will drink as much of this as it takes to make them completely full. This ensures that the calves won't suck on each other when we take the nursing station out of the paddock," Marshall explains.

"Because of the equal opportunity they have to drink, all the calves seem to do real well," he explains. "The investment was worth it. In only 45 min., one man can feed 90 calves and clean the nursing station."

He cleans it out with a chimney cleaning brush and five gallons of soapy water.



The biggest advantage of Marshall's feeder is that all calves get the same access to milk.



Feeder tows easily behind an ATV. Once on pasture, it's leveled-up and filled with 80 gal. of milk.

Contact: FARM SHOW Followup, Keith Marshall, 24109 Constitution Hwy., Unionville, Va. 22567 (ph 540 854-6800; fax 540 854-0818; email: marshallfarms@adelphia.net; website: www.marshallfarms.us).



Planter lets Smith reduce soybean population from 200,000 seeds per acre to 120,000 while increasing yields.

## Home-Built Precision Seeder

"I've planted 670 acres of corn, 1,100 acres of soybeans, and 300 acres of wheat so far with this precision air seeder which I finished building in the spring of 2004," says Darren R. Smith, Clarkton, Mo.

"It will plant 9 1/2, 19, or 38-in. rows or any combination of the three. It has a 120 bu. air box that feeds 47 precision meters mounted on the planter row units. The meters are powered by hydraulic motors controlled by an experimental computer mounted in the cab. The computer monitors the popularity of each row, and can even send emails or be used to play video games.

"Each row unit is equipped with in-furrow spray attachments and seed firmers.

"One unique feature on this planter is that

it's fitted with a Yetter Seed Jet unit that loads and unloads the planter hopper. In addition, there is also a rear view camera mounted on back of the planter. The rear toolbar and units are designed to be quickly detached if the operator wants to plant only 38-in. corn or 19-in. beans. It's capable of planting 19-in. corn as well.

"This planter has allowed me to reduce my soybean population from 200,000 seeds per acre down to 120,000 while increasing my yields due to equal distance spacing of the beans in 9 1/2-in. rows."

Contact: FARM SHOW Followup, Darren R. Smith, Smith Farms, Rt. 1, Box 92, Clarkton, Mo. 63837 (ph 573-448-3680)



Planter's fitted with a Yetter Seed Jet that loads and unloads the seed hopper.



Loron Skretteberg's splitter easily chops through 30-in. dia. logs. "In one hour, I can split enough wood to heat my house for two months," he says.

## 3-Pt. Splitter Handles Any Size Log

"I had a lot of big logs to split and got tired of trying to get them up onto my small log splitter. So I built a big 3-pt. splitter that's easy to use and saves a lot of work," says Loron Skretteberg, Carson, N. Dak.

The splitter is equipped with a large 6-in. dia., 30-in. stroke hydraulic cylinder that has 70,000 lbs. of force. It operates off tractor hydraulics. The main frame was made from 8-in. sq. tubing and channel iron, welded to a splitting table made from 1-in. thick steel plate.

Skretteberg can lower the splitting table to the ground to load a chunk of wood and then lift it up to waist level to split. Someone in the tractor cab operates the controls.

"It completely eliminates the need to lift logs," says Skretteberg, who uses the splitter on his International Harvester 1486 tractor. "I bought the big hydraulic cylinder at a surplus store. My total cost to build the splitter

was about \$1,200. It'll split a 30-in. dia. log with ease, and I've even used it to split logs up to 4 ft. in diameter by sliding the log part way in and splitting off one side, then repeating the process on the other sides until I can fit the entire log in. It works fast - in one hour I can split enough wood to heat my house for two full months.

"One big advantage is that the splitting wedge goes all the way to the bottom so the log never gets stuck. And, the split piece stays on the table instead of falling onto the ground like it would with a conventional horizontal splitter. I plan to mount the controls on back of the tractor so I can operate the splitter by myself without needing someone up in the cab."

Contact: FARM SHOW Followup, Loron Skretteberg, 5880 54<sup>th</sup> Ave. S.W., Carson, N. Dak. 58529 (ph 701 622-3261).