"No Freeze" Livestock Waterer

Faced with the rising costs of electricity, Saskatchewan livestock farmer David Flundra decided he needed to do something different with his cattle waterers. He sat down with his son Dustin and their engineer friend Lowy Gunnewiek to design an energy-free water bowl system that could handle the most extreme cold.

"We did some brainstorming about the features we liked or didn't like in other waterers and came up with our own," says Flundra.

They produced two sizes, the SB-2, a double column 120-gal. system built to handle about 100 cows, and the SB-3, a triple column 192-gal. unit sized for 200 plus cows. The waterers also work for pigs, bison, elk and goats.

The black poly columns measure 8 ft. in length and are buried in the ground to a depth of just under 7 ft. leaving approximately 20 in. sticking up out of the ground. Water enters through a brass fitting 6 1/2-ft. underground and rises through a tube in the central column to a valve and ball float assembly near the top. A separate tube runs between the columns to equalize the water level. The water supply valve can be opened or closed from the top with a simple T-shaped tool.

"The water entering at the bottom is always warmer from the ground heat," Flundra says. "As animals drink, it equalizes in all columns. It's constantly self-circulating as it changes position throughout."

The columns are fully insulated with precut molded dense foam insulation. In the upper 2 to 3 ft., the insulation value is increased to R50 to protect it from the more extreme elements.

"You'll sometimes get a small amount of ice buildup in the drinking bowls as opposed to the center column with the valve and float assembly because it's encased with insulation and a lid to contain heat."

Flundra says the waterers can be installed anywhere a water line can be trenched. He recommends using 1 1/4-in. pipe but size



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calculations for long distances can be made depending on pump capacity. A 1 1/2-hp. variable speed pump in his own farm's water source easily handles numerous waterers while pumping through 5 miles of buried water pipe.

The units are built at Flundra's home ranch in Maple Creek and can be shipped anywhere throughout North America. A South Dakota distributor handles much of the U.S. market. The SB-2 sells for \$2,100 and the SB-3 for

\$2,500 (CAD), plus S&H.

. "We have inventory, so we never have to tell anyone to wait," says Flundra. "Plus, I'm easy to reach on the phone so if you've got an issue, you'll be talking to the guy who built and designed them, not a recorded message. On top of that, if I can't take care of the problem over the phone, I'll come to you and fix the issue."

Contact: FARM SHOW Followup, David Flundra, Stock Boss, P.O. Box 477, Maple Creek, Sask., Canada S0N 1N0 (ph 833-662-2449; cattle.creek@xplornet.com; www. stockboss.ca).

Double-Sickle Mowers Cut Cleaner

"The synchronized and double-sickle cutting action on our mowers does an exceptionally clean job in all types of hay crops, cutting stems very close to the ground," says Jacob Blank of I & J Manufacturing. "The sickles have heat-treated blades that hold their edge longer and produce a cleaner cut, which is better for the crop because it allows faster regrowth."

Operators say an I & J sicklebar mower works quieter than a disc or drum mower and requires lower engine speed and less power to operate. The Pitmanless gear drive system also allows the bar to easily cut road ditches or other angled terrain. Blank says that because the bar doesn't have guards, the mowers typically don't have any plugging issues, even in clumpy ground or where pocket gopher mounds are present.

"The mower and sickle design is originally from Germany and we've adapted it to several different models for horse-drawn or tractor use," Blank says. "Two of our horse-drawn models have 9-hp. engines, and another is ground driven. The pto-drive models for compact tractors can be pull-type or mounted on a 3-pt. hitch. We have a skid steer model that runs with a hydraulic motor, and we can also build a model for a loader and put three bars together for a triple wide.

Cutter bars for I & J mowers are 5 1/2, 7, 8 or 9 ft. long. A one-horse vineyard mower has a 32-in. cutter bar.

Steve Groff of Cedar Meadows Farm uses his I & J mower for cutting 8 to 10-ft. tall fiber hemp and says it cuts the thick stems like a hot knife through butter. He adds that the crop lays down smoothly, and every stem



I & J Mfg. offers several models of precision sickle mowers that clip hay and grass stems clean and close to the ground, don't plug, and allow faster crop regrowth.

is cut clean.

Contact the company or any of its dealers in the U.S. and Canada for pricing and availability.

Contact: FARM SHOW Followup, I & J Manufacturing, 10 So. New Holland Rd., Ste. 2, Gordonville, Penn. 17529 (ph 717-442-9451; sales@IJmfg.com; www.ijmanufacturing.com).



"One of the unique features is our remote control hydraulic leg restraints. They safely catch and restrain the cow's legs without risk of injury to the trimmer or the animal," Ressler says.

Self-Propelled Portable Hoof Trimming Chute

Tuffy Tables says their portable cattle chute is the best hoof trimmer on the market for technicians who travel from farm to farm.

The independent chute is powered by a large 36-volt rechargeable battery bank producing hydraulic power to run its various components. The batteries can be recharged overnight when the unit is not in use or even during a working session.

"There's a receptacle on the side; you just plug in a standard extension cord to recharge the electrical system," says co-owner, Josiah Ressler. "It depends on the number of cows being trimmed in a day. You may have to keep it plugged in to maintain the power supply."

Standard features include a hydraulic headlock and squeeze doors, left or right tilt mechanism, rope hook leg ties, grinder holders and tool tray, manure chute, and powder-coated finish.

The chute has a large variety of available options as well.

"One of the unique features is our remote control hydraulic leg restraints. They safely catch and restrain the cow's legs without risk of injury to the trimmer or the animal," Ressler says.

A self-propelled driving system is also popular to help maneuver the chute into tight quarters without the use of a skid-steer or truck. Hydraulic sorting gates, toolboxes, lighting packages, and hydraulic awning kits are some of the almost infinite numbers of add-ons.

"We also have a remote control for the various features which allows the user to stand back during operation of the different components," Ressler says. "It's user-friendly, keeping the handlers safe while adding efficiency. It also lets users choose their viewpoint angle on the work process and equipment."

The portable chutes are built in Lancaster County, Penn., and are sold direct to customers worldwide.

Costs of the units vary from a low of \$40,000 up to around \$90,000 for a unit with all the bells and whistles.

Contact: FARM SHOW Followup, Josiah Ressler, Tuffy Tables, 891 Rettew Mill Rd., Ephrata, Penn. 17522 (ph 866-938-8339; sales@tuffytables.com; www.tuffytables. com).

Hoop House Bi-Fold Door Stays Open

Quinton Tschetter found a simple solution to a common problem with hoop house doors. Keeping side-hinged doors open in the summer can be difficult because it's easy for the wind to catch them.

"I wanted a door that would stay open and yet be easy to open and close," says Tschetter. "I decided to try a bi-fold and copied a concept I'd seen on shop and equipment buildings."

Tschetter framed in the ends of a 26 by 65-ft. high tunnel for 8-ft. tall by 16-ft. wide doors. He made the two hinged panels of each bi-fold door with 1 by 4's, overlapping each other to secure 20-oz. canvas coverings.

"I used the same type of canvas used on hoop houses designed to store equipment," says Tschetter. "This minimized the weight of the folding doors."

Tschetter further reduced the labor needed to open the doors, cutting the weight of the doors in half with a 4-rope, 2-pulley system. "I have to pull the door out a little to start it, but once it gets started, it is easy to lift with the pulleys."

Tschetter has a bi-fold door at either end of the high tunnel and a walk-through door at one end. "At one time, we had seven large hoop houses devoted mostly to flowers," says Tschetter. "I tried a lot of different door designs, and this is the one I like the best."



Tschetter made the two hinged panels of each bi-fold door with 1 by 4's, overlapping each other to secure 20-oz. canvas coverings.

Contact: FARM SHOW Followup, Quinton Tschetter, 2379 Hwy. 92, Oskaloosa, Iowa 52577 (ph 641-660-9765; qct1944@gmail. com).