



Floating pump consists of a piston displacement pump mounted on pontoons that were made from two 15-ft. lengths of 6-in. dia. irrigation pipe.

PADDLE WHEEL PUMP MADE FROM COMBINE CYLINDER

Floating Pump Protects Cows, Stream Banks

"It's a great way to keep cattle out of water and protects stream banks from damage by livestock," says Orrin Hart about his innovative cattle watering system.

Hart, a 73-year-old Claresholm, Alberta, rancher had help from his sons John and Andy.

The device consists of a piston displacement pump mounted on pontoons. It pumps water from the creek to a 1,200-gal. holding tank located 200-ft. from the bank and 20 ft. above water level.

Hart used two 15 ft. lengths of 6-in. dia. irrigation pipe to make pontoons by welding the pipes shut on the ends. A paddle wheel that drives the pump was made out of an old combine cylinder. He removed the rub bars and replaced them with eight 1 by



Water is pumped from the creek to a 1,200-gal. holding tank 200 ft. away.

6-in. wood paddles. Pulleys and V-belts connect the wheel, which turns at about 16 rpm's, to the pump.

The paddle wheel and pump, which move about one gallon of water per minute, mount in a wooden frame attached to the pontoons. A heavy cast iron wheel off a disk serves as an anchor. Water is pumped constantly as long as there is even the slightest current. It goes into the holding tank through a 1/2-in. dia. hose. From there, it supplies two 300-gal. troughs with water for Hart's registered Angus herd.

"It works in as little as 6 in. of water," Hart says. "It saves cattle a trip down to the creek bank for a drink, protecting not only the animals but banks and water quality as well."

Out-of-pocket expense was \$540.

Contact: FARM SHOW Followup, Orrin Hart, Box 578, Claresholm, Alberta, Canada TOL OTO (ph 403 625-2127 or 2060).



Add-on grain hopper mounts on front of a Case-IH 8610 big bale processor. A 4-in. dia. auger lays grain on top of the hay which is laid down in a windrow.

LAYS GRAIN ON TOP OF HAY

Hopper Adds Grain To Hay "On-The-Go"

"We background 400 to 600 calves a year and needed an efficient way to feed hay and grain together," says Florian Johnson. He and his son Dale mounted a grain hopper on front of their big bale processor so they can feed out chopped hay and rolled grain in one operation.

In the past, the Rich Valley, Alberta, ranchers first chopped hay into fenceline feeders and then used 5-gal. buckets to feed out grain.

The add-on grain hopper mounts on front of their Case-IH 8610 hay processor. The hopper is 2 1/2-ft. wide by 5-ft. long by 6-ft. deep. They made it out of 14 ga. sheet metal. It holds about 40 bu. of rolled oats and barley in a 50:50 mix.

A 4-in. dia. auger runs up from the bottom of the hopper. A drop tube lays grain on top of the hay which is laid down in a windrow alongside the processor.

To power the grain auger, the Johnsons attached a V-pulley to the 1,000 rpm pto shaft on the hay processor. The pulley drives over an air conditioner clutch off a Ford car,

which is wired to a switch in their tractor cab. Another shaft runs from the air conditioner clutch to the front of the hay processor to drive the V-pulley attached to the auger. The design allows them to start and stop the auger from the tractor whenever they want to.

The Johnsons feed six 5 by 6-ft., 1,200-lb. bales and two hopperfuls of grain a day in two feedings. They can change rations simply by changing gears on the tractor. The slower they go the more grain is discharged and vice versa.

"We move the unit over one tractor wheel width each time we feed so the hay and grain are discharged on clean, packed snow," says Florian.

The Johnsons built the grain hopper attachment last fall. Out-of-pocket expense was about \$1,000 (Canadian).

Contact: Florian and Dale Johnson, Meadow Valley Farms, R.R.1, Gunn, Alberta, Canada TOE 1AO (ph 403 967-5950).

Vol. 21, No. 2, 1997

Harold M. Johnson
Founder & Publisher Emeritus

Editor/Publisher - Mark Newhall
Associate Editor - Bill Gergen
Associate Editor - Jim Houtsmas
Office Manager - Anne Lash
Circulation - Ardycy Potter, Nora Nagel

FARM SHOW is published bimonthly (6 times a year) for \$15.95 per year (\$19.95 in Canada and foreign countries) by Farm Show Publishing, Inc., P.O. Box 1029, 20088 Kenwood Trail, Lakeville, Minn. 55044. Periodicals postage paid at Lakeville, Minn., and Madelia, Minn. POSTMASTER: Send address changes to FARM SHOW, P.O. Box 1029, Lakeville, Minn. 55044 (ph 612 469-5572; fax 612 469-5575). Single copy price is \$4.00 (\$4.50 in Canada). Publication No. 469490. GST No. 131272023.

FARM SHOW does not accept advertising and focuses exclusively on new products and product evaluations.

FARM SHOW does not charge for new products or services featured in the magazine. Anyone with a new product or service of interest to farmers - whether inventor, manufacturer, marketer, distributor or whatever - is invited to contact FARM SHOW regarding possible publication.

AS A SERVICE TO READERS, FARM SHOW publishes newsworthy products and ideas. Because of possible variance in the quality and condition of materials and workmanship, FARM SHOW cannot assume responsibility of proper application of techniques, or proper and safe functioning of manufactured or reader-built projects resulting from information published in this magazine. FARM SHOW attempts to verify product claims in editorial reports and adheres to rigid standards. However, the publisher assumes no liability for accuracy and validity of claims.

Printed in U.S.A. All rights reserved, including the right of reproduction, in whole or in part, without written permission.

March-April, 1997

3-Pt. Hydraulic-Powered Wire Stretcher

A new 3-pt. mounted hydraulic fence stretcher uses a pair of 42-in. cylinders to tighten up to 1/2 mile of wire at a time. The cylinders have 6-in. dia. pulleys on top of them. A length of cable runs through each pulley and then through another pulley mounted below at each end of the frame.

To stretch a wire you back the rig up to the middle of the fence, connect both cables to the loose ends of the wire, and then raise both cylinders until the wires are tight. Then you splice the ends together. A pressure gauge shows you how much pressure you are exerting on the wires.

The wire puller is also equipped with spools to unroll one to four rolls of wire at the same time.

Sells for \$2,100. An optional attachment for stretching woven wire sells for \$80.

Contact: FARM SHOW Followup, Leland Mfg., Box 112, Ismay, Mont. 59336 (ph and fax 406 486-5462).

