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by Rob Gilgan

Rimbey farmer's innovation that puts cows in control of their water supply has been named the Harvest Manufacturing Farmer Innovation or Invention of the Year at the Alberta's Farm Classic Awards. Jim and Jackie Anderson were on hand in Nisku Saturday to accept the award at the second annual gala banquet.

The couple were recognized for developing the Frostfree Nosepump, a simple mechanical device that enables livestock to pump their own drinking water, year round, even in remote pastures that aren't serviced by electricity. "I don't think we can take full credit for inventing the Frostfree Nosepump," Jim Anderson explains. What Anderson has done is refined an idea he picked up from Walter Diehl, a friend and farmer who passed away recently.

Once installed, the pump system is a low-maintenance, self-service watering station that makes good use of existing water supplies. "It can make your dugout a year-round watering source for cattle," Anderson explains. It can be installed in a pasture by drilling a simple well down to water level or it can also be adapted to an existing well casing. That means that abandoned water wells on old homesteads that still have good water in them can become a ready supply for pastured herds. "The biggest advantage is that you're not limited by access to power," he said.

Cows are easily trained to operate the pump and once they get thirsty they develop the incentive to think for themselves and drink when they want to. "They've got a neck on them the size of our body. The experienced ones will train the newcomers," Anderson explains.

There's a period of a couple of days when they crowd around the device and things get congested, but over the course of

a few days, the whole herd learns that water is available, around the clock. Anderson describes an area farmer who now has one of the nosepumps installed on his dugout. Previous to last winter, he had to fuel up a generator, clear a hole in the dugout ice, run the generator to get the pump to fill a tub for his cattle as they stood around the dugout. He would then wait here for two and a half hours, while the generator worked its way through the fuel.

He had to repeat that every day, like clockwork and it was the only time his cattle had access to drinking water. Now they drink when they feel like it and he drops by every few days to check on the

water supply.

Based on Jim's own design that's been improved with the help of engineers from the Alberta Research Council, the nosepump exploits four refinements that keep it from freezing, even in the coldest Alberta winter. A drain hole five feet below the water basin drains the pipe down below the frost line. The pump is mounted in a 24" culvert that's properly insulated to capture and hold rising geothermal heat.

The whole assembly is surrounded by a concrete pad that's insulated with Styrofoam from the ground beneath and a frost break between the concrete and the steel culvert is filled with aerosol insulating foam. The concrete pad keeps the cattle from digging the ground up around the

pump's water basin.

Locating the system away from the edge of the water source, whether it's a river or a dugout, keeps the water source clean and reduces environmental damage in riparian areas. It took some time to refine the design and work the wrinkles out, but now Anderson has the nosepump hood and lever manufactured in Red Deer and finished with a weather and cattle resistant powder coating.

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Darryl Walters of Harvest Manufacturing applauds Jim and Jackie Anderson of Rimbey on their Invention/Innovation Award at Alberta's Farm Classic Awards in Nisku Saturday. The couple won the award for

## Local farmer wins...

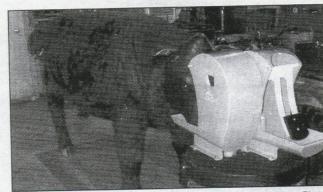
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The parts and assembly instructions come with a video that demonstrates how simple the system is to install in a variety of situations. The device first went on the market in March of this year and the Andersons are enjoying watching the system catch on. The Frostfree Nosepump fits into agriculture sustainable philosophy fulfilling a vital function on a successful without being dependent on other inputs.

The couple were happy

with the response the system received at the recent AgriTrade Fair in Red Deer and the recognition at Alberta's Farm Classic Awards should yield even more interest from farmers Alberta. across Anderson looks forward to introducing the pumps to farms in eastern Canada and enquiries from as far away as Texas mean the marketing has just begun.

The Andersons have created a detailed web site for their nosepumps at http://www.frostfreenosepu mps.com.



Rob Gilgan Photo

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EL-C the electric cow demonstrates the Frostfree Nosepump. The full sized model, built by Jim and Jackie Anderson drew crowds at AgriTrade in Red Deer and at the Grey Wooded Forage Association seminar in Rimbey last week.

