

# Cattle water themselves, even in freezing weather

By Kim Prinz  
News Staff

It's -38° Celsius. Your cows are thirsty. Unfortunately, they're out in a remote pasture and there's no electricity.

So what do you do?

Well, you could try an innovative product that was designed by Rimbey resident Jim Anderson.

Though fairly new to the market, Anderson's invention has already won him the 2002 Alberta Farm Classic Award for Innovation.

Anderson admits that he originally got the idea from Walter Diehl, but when Diehl died, Anderson pushed ahead with the idea and in 1999, the first Frostfree Nosepump was installed on the Anderson's farm.

In 2002, the Andersons began selling the pumps to the public.

The Frostfree Nosepump requires no heat and no electricity.

Cattle need only prime the pump by pushing it with their nose four times and they have access to water, even on the coldest winter day.

"Some ice may form on the side of the hood or in the trough," says Anderson's wife Jackie.

"But you can just knock that off with a hammer. That's the only maintenance these systems need.

Before the Frostfree Nosepump, the only option available to farmers for off-site watering, aside from electricity, was solar systems," says Anderson.

"But this system is a lot less expensive than a winterized solar system. There are absolutely no electronics in the pump—electronics always increase prices. And electronics are always the parts that break down.

"This system is far more dependable.

"The technology has actually been around for hundreds of years.

"It works the same as an old-fashioned hand-pump," he adds.

The Frostfree Nosepump can be installed in four different ways: in a dugout, in a well,

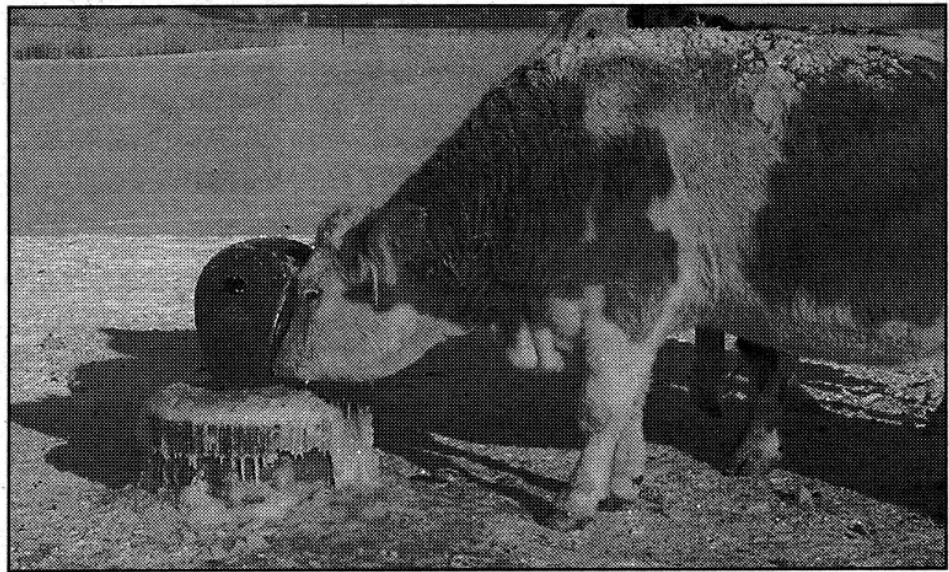


Photo by Kim Prinz

Just four quick pushes and this cow can drink water in the coldest temperatures. Jim Johnson's Frostfree Nosepump has no complicated electronics and does not need electricity or heat to operate. The cow simply pushes the pump with her nose four times, and her thirst is easily quenched.

that keep the nosepump from freezing.

The first is a small drain hole that is located five-feet below the water trough that drains the pipe below the frost line.

The second is an insulated 24-inch culvert—the culvert is lined to a depth of four- to eight-feet with 2-inch rigid insulation that captures and holds rising geothermal heat.

The third is an insulated concrete pad that surrounds the whole system; it also contains a frost break between the concrete and the steel culvert that's filled with an aerosol insulating foam.

Finally, the concrete pad itself keeps cattle from digging the ground up around the nose pump.

For more information on the technical details of the system, access the Anderson's website at [www.frostfreenosepumps.com](http://www.frostfreenosepumps.com).

One of the best things about the system is that it keeps cattle out of dugouts," says Anderson. "These systems are good for the environment."

"We get calls every year from farmers who've lost a cow in their dugout because of the

ice," adds his wife, Jackie.

"Losing two cows would pay for this whole system," she adds

Anderson had help developing the Frostfree Nosepump from the Alberta Research Council and currently has his patent pending in Canada and the US.

He stresses that anyone interested in installing one of his systems can apply for the Alberta Water Grant, which will cover one-third of the price of installation.

So far, the Andersons have sold slightly more than 100 units in Alberta, Saskatchewan, Manitoba, and they have even sent four units to Ontario. Their big hope is to break into the US market.

The Andersons have four systems on their farm that range in lift from 10- to 47-feet.

The deeper the system, the more resistance cattle get from the pump, so they don't recommend installing anything with static water deeper than 50-feet.

They use the systems year-round and suggest that farmers install the system in the summer to get the cattle used to using it.

That way, cattle will adapt to the system faster when it gets colder.

The Andersons have found that cattle that are used to summer nosepumps generally adapt to the Frostfree Nosepump very quickly. Others may take up to three days to figure out how it works.

"We recommend you start with about 15 or 20 cows," says Anderson's wife said.

"Once one or two figure it out, they'll teach the rest of the herd."

Frostfree Nosepumps are available only through Jim and Jackie Anderson.

For more information, call (403) 843-6740 or toll free at 866-843-6744.

LOUISE HOUGH  
R.R. 3 PONOKA, AB  
T4J 1R3

BUS. (403) 350-4622  
FAX: (403) 782-6539

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