

Black sheep have the blood of more than 20 breeds so their owners are not surprised when occassionally a red-wooled, or other-colored lamb,

"YOU BET! AND IT'S WORTH MONEY"

"Baa, Baa Black Sheep, Have You Any Wool?"

References to "black sheep" are usually negative, but not at Jones Sheep Farm in Kansas where an entire flock of black sheep is a profitable busi-

Gary and Marilyn Jones, of Peabody, have probably the largest black sheep flock in the United States. Their 150 black ewes produce nearly a ton of wool a year, plus a crop of lambs that are in demand as breeding stock

Their black sheep are a strain, not a registered breed, though there are two black sheep associations in the U.S.A. But the black sheep breed true and produce 90-95% black lambs, Gary points out.

The idea of breeding black sheep started when the Joneses got a Border Leicester ram that was black. When bred to a Karakul, a naturally black breed, the offspring were almost 100% black. Since then, the Joneses have mixed other white wooled breeds - such as Lincoln, Cotswold and Corriedale - to get long staple wool into the strain.

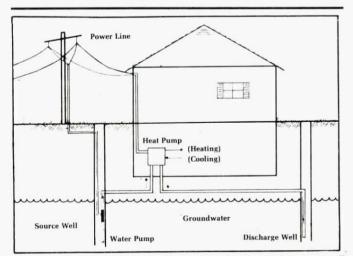
Breeding stock of the black strain is in heavy demand all over the country. with biggest demand currently in New England. The strain has a placid temperament and can stand hot temperatures. Rams and ewes of breeding age are sold for \$200 or more a head.

Black wool is also in heavy demand for spinning. Wool from the Jones' flock is 6-in, staple length and has a low percentage of wool grease and therefore minimum shrinkage. Fleece weight averages right at 10 lbs.

Black wool generally brings more than double the price of white wool. Greys, silver tips, and mixtures also bring premium prices.

An offshoot of the sheep business is a spinning school conducted by Marilyn for two weeks every June. She can accommodate 12 students at a time. In between the spinning schools, the Joneses have started classes in plant identification and photography. These subjects are also related to wool, as plants are used as natural dye materials, and photography is used to record wool colors and the finished products of spinning and weaving.

For more information, including a descriptive brochure, send \$1 to: FARM SHOW Followup, Jones Sheep Farm, Rt. 2, Peabody, Kan. 66866 (ph 316 983-2815).



In a ground water heat pump system, water is pumped from one well into a heat pump. The pump removes a few degrees of heat from the water to warm the house or cool it and then discharges thereafter into the second well.



Pollert's ground-water furnace not only heats the house in the winter but cools it in the summer.

HEATS IN WINTER, COOLS IN SUMMER

Heat Your House With Underground Water?

By Pat Schaffer

Question: Can you heat a 3,270 square foot home . . . in the severest North Dakota winter weather . . . for less than \$80 per month?

For Donald and Georgine Pollert, James Valley Electric Cooperative members farming south of Litchville, N.D., that answer is ves!

Despite last winter's severe weather - remember, they called it the coldest winter of the century their highest monthly heating bill (January 1981) was about \$80. You see, the Pollerts solved the problem of low-cost heating for their new home with a groundwater heat pump.

Because energy efficiency had the highest priority for the Pollerts, the home was constructed with fully insulated 8-in. wood basement walls, 6-in. exterior walls, 14 in. of insulation in the attic, and triple-glazed windows. Windows on the north and west walls were kept smaller; larger windows and a patio door were placed on the south wall for greatest efficiency and maximum solar gain.

A groundwater heat pump works somewhat like a refrigerator. When a gallon of warm water is placed inside a refrigerator, the heat is removed from the water, dropping its temperature several degrees. The heat that is removed from the water is expelled into the kitchen. Likewise, a groundwater heat pump cools many gallons of water and expels the heat into the home.

The key to successful installation is an adequate water supply of the proper temperature, and one that is low in iron content. The Pollerts were hopeful; they had a good supply of water from a shallow 50-ft. well. But would it be enough? The well had to have the capacity to supply at least 8 to 10 gal, per minute.

Traut Wells, a well-drilling firm from Jamestown, was called in to test the water supply. It was good news. Don says tests proved the well was capable of supplying up to 110 gal. per minute - far more than was needed.

According to Don, the system is simple. With a shallow well groundwater heat pump system, two wells must be dug. Water is pumped from one well through the heat



The only visible part of the Pollert's well is a capped pipe. Pollert, shown above, says the two wells (48-ft. deep) cost \$1,724 for drilling and plumbing, and the heat pump cost \$3,540 installed.

pump; after the heat is extracted, the water is discharged into a second well located about 130 ft. from the first well. The water is not exposed to any air, so no state water permits are

On the Pollerts system, the well water enters the heat pump at 46 ° F., 6° are drawn off, and the water is discharged into a second well at 40 °. Don says it's important to draw water from the north well and discharge into the south well. "They tell me water flows in underground rivers from north to south, just like it does above ground," he says. "So by drawing your water from the north well and discharging it 'downstream' in the south well, the 40-degree water is carried away and doesn't lower the overall temperature in the first well," he explains.

When you talk to Don and Georgine about their heating system, their enthusiasm is contagious; they certainly believe in this type of heating system and quickly make a believer out of you. Don says, "My neighbors ask me, 'How's your water heat?' And I tell them about it; I'm really satisfied. We were lucky - really lucky that we had the water supply and could use this system."

For more information on heat pumps, contact your local rural electric cooperative.

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