

At this time, while the dairy industry has been captivated by synthetic protein (BST) injected into a dairy cow to get her to produce more milk, a new animal genetic manipulation process has been born. Now you can have a whole stable full of clones of your favorite dairy cow. The process is called nuclear transfer.

To accomplish this new way of breeding cows, nuclear material from a donor embryo is taken to create new embryos, each identical to the donor embryo. Cloned embryos are transferred to recipient heifers or cows or frozen for later use to make additional clones or pregnancies. The calves that result from this process are identical, each containing the exact genetics of the donor embryo. In addition, with a perfected selection process, you can have your choice of boys or girls added to your order from the test-tube.

The incredible possibilities here could make BST obsolete in less time than it takes to get FDA approval on anything. Get yourself an embryo out of an Excellent 40,000 lb. milk cow that is sired by... let's say Carlin-M Ivanhoe Bell. Then ask the lab to make a model set of offspring. When these identical heifers mature, all the cows in your barn will look Excellent and have the extraordinary milk production characteristics of their sire and dam born right into their bodies. When you lose a cow from milk fever, hardware or old age, just go back to the lab and reorder a few more identical clones from the original embryo. This will keep your herd pleasingly uniform.

Nuclear transfer is available right now with all its tremendous possibilities to do the world a lot of good and within the means of very ordinary dairymen. And we would expect that many dairymen will want to use the service.

But while everyone thinks of the beautiful, useful animals that can be genetically generated with this technology, we can't help but suppose some diabolical person might also create a deformed animal to attract attention to a peep show on the midway at the county fair.

With all the potential of this new technology, maybe some day soon, inheritable defects in human beings will also be corrected with nuclear transfer. This would greatly benefit many future generations of people.

But then we ask, may scientists, within our lifetime, need to stand in their laboratories and wrestle with the moral decision to create a clone of Mother Theresa rather than create a clone of Adolf Hitler.

We live in a sobering world.

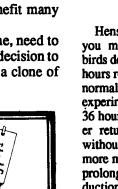


Saturday, February 3 Cumberland County Holstein Association Meeting, Penn Township Fire Hall, Huntsdale, 10:45 a.m. (Turn to Page A44)

Farm Forum

Editor:

I was so glad to see an old Rumely oil pull 16-30H on page D22 in Lancaster Farming. That made my day. Thank you! I made them my hobby. About 1920 on a cold morning in harvest time, you could hear them running no matter which way you turned your head. They were hard to beat. I like your paper. I found a few "Rumelys" in your paper in mail-



box markets. C.E. Stambaugh York, Pa.

Editor: I agree with the Editor's comments on the Lottery in the Farm Show. I am glad someone took a stand against some of the wrong things that are done in this state and nation. Thank you! Timothy Hoffman

Dover



To Plan **Forage Management**

A good supply of quality forages is one of the most important things in the feeding program of dairymen, cattlemen and sheep producers. Growers should now be planning what kind of forage crops they hope to produce this year.

Both hay and silage crops respond to good management. Growers who make a special effort to obtain maximum yields of quality forages usually produce more than the average.

Some of the top alfalfa growers produce double the tonnage per acre than the average. In fact some of the top alfalfa growers in the state averaged over 8 tons per acre. This did not just happen. They planned and made decisions on data from their farm records. Doing all the practices that have been successful, and doing them on time, will normally bring good results.

To Check **Poultry Waterers**

Hens without water can cost you money. In one experiment, birds deprived of water for only 24 hours required 24 days to return to normal egg production. In most experiments, after a period of only 36 hours without water, birds never returned to normal. A flock without water for 36 hours or more may molt, then go through a prolonged period of restricted production. This is especially so in older flocks. If water is restricted for 48 to 60 hours, severe mortality can result from dehydration.

As you walk through your houses each day, check the waterers to make sure none are dry or a line is plugged. I am aware of a case where the water line was restricted, by a faulty valve, to the middle row of cages for nearly 3 days. Production was seriously affected in that row.

A few minutes a day checking waterers can well mean saving a lot of dollars -- don't wait until molted feathers are under the cage.

To Prune Tr

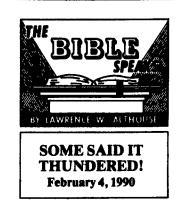
lot of pruning to do. I'd like to remind growers and homeowners not to overprune young trees or those which haven't yet started to bear fruit. There is a tendency to either prune the small trees too heavily, or simply to leave them alone. A middle-of-the-road course is best.

The training of young trees should involve just enough cutting to maintain a healthy central leader and to develop the desired number of well-spaced scaffold branches. Branches that are either poorly spaced, or ones making very narrow-angled crotches should be removed.

Keep in mind, when you start pruning early, start with your hardier trees, the apple and pear with plums, sour cherries next and leave your peaches till near the end; they're quite tender.

To Correct **Drainage** Problems

The recent heavy rains provide a good chance to observe the



Background Scripture: John 12. **Devotional Reading:**

John 12:44-50. This is one of the most dramatic moments in John's Gospel: Christ praying, "Father, glorify thy name," and a heavenly voice replying, "I have glorified it and I will glorify it again" (John 12:28). How ironic, that, although there were many people present on that occasion, all of whom heard something, some got the message, while others did not. Some heard the heavenly voice and said, "An angel has spoken to him," while others said simply that "it had thundered." EYE OF THE

BEHOLDER

This brings to mind some of the accounts that I have read of the third and final great vision on October 13, 1917 at Fatima in Portugal. Seventy-thousand people were present that day and thousands heard the heavenly voice and saw the celestial manifestations, but thousands of others did not. Even more ironic is the fact that some of those who "saw" and "heard" were those who came to Fatima to scoff, while some of those who did not "see" and "hear" were those who came with the expectation of something miraculous.

Was the sound that people heard in John 12 really the voice of God, or was it "only thunder"? It has to be one or the other, doesn't it? No, not really. I submit water drainage problems around many barns and storage buildings. If surface water drained into farm buildings or into homes, then something should be done about it very soon. Surface water should be directed away from buildings by way of terraces or diversion ditches.

Water should not be permitted to flow down against buildings from upgrade. This will weaken the structure and wash soil away from the foundation. Water that seeps into a building from underground is a different problem and more difficult to control.

However, the surface water can be directed around and away from farm buildings. Also, the area around wells should be protected from surface water contamination. Water from feedlots and barnyards should not be allowed to flow directly into public streams; pastures or holding areas will help prevent the possibility of pollution.

to you that it can be both, that to some degree that which a person sees and hears is dependent upon his or her perception and reception. I don't mean to imply that the difference between the voice of God and the sound of thunder is just that and no more, but I do believe that it is at least one of the factors that helps to make that difference. If "Beauty is in the eye of the beholder," much of faith is also. On that day in John 12 I'm sure there was both thunder and the voice of God and the receptivity of the people helped to determine which of these the people would hear. **BEYOND THE**

CONSCIOUS

But what about the skeptics who "heard" and the faithful who didn't? A series of experiments by Dr. David C. McClelland of Harvard University involved showing a film about Mother Teresa to groups of students. When questioned afterwards, the students were split roughly 50-50 in their response, half with positive responses and half with negative ones. But, when each person in the study was tested for salivary immunoglobulin A — one of the body's primary defenses against the cold virus - Dr. McClelland found that some who said they did not like Mother Teresa nevertheless had a positive unconscious physiological response. Dr. McClelland says: "At the conscious level, a person may not believe at all, but at the unconscious level, something in the person may still respond (positively)..."

There is more to faith than the ideas and words that we offer up from our conscious minds. Deep down in our spirits there are elements of faith and disbelief that make the difference between hearing the sound of thunder or the voice of God. (Based on copyrighted Outlines produced by the Committee on the Uniform Series and used by permission. Released by Community & Suburban Press.)

General pruning of apple trees should be in full swing at this time of year, especially if you have a

