

## The Future of Agriculture

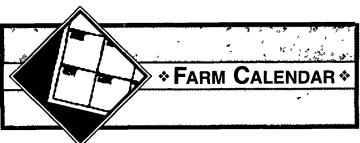
It was reported by the Associated Press last week that an experiment with genetically engineered animal heart cells indicates that science one day may learn how to replace damaged cardiac muscle with new tissue after a heart attack.

The study in the Proceedings of the National Academy of Sciences demonstrates for the first time that mammal heart cells can be genetically engineered to grow and reproduce endlessly in a test tube. Dr. William C. Claycomb of Louisiana State University Medical Center says that his lab also was able to show that genetically altered mouse heart cells could survive and beat like normal heart muscle cells when placed into the damaged heart of a pig.

To predict what role agriculture will play in the genetic engineering sciences of the future is beyond our ability. Who would have thought 10 years ago that dairy farmers would be willing to pay over \$7,000 for a pick of transplanted embryos six month in advance of birth at the state Holstein sale. Yet, ET cattle and the process of collecting embryos from the best cows is now quite common and even financially within the reach of most dairy farmers.

Then we have genetically engineered com and other grains. And we have cloned sheep and dairy cattle. Even now you can imagine that someday, maybe soon, you will call your genetic engineer and order replacement parts for your best bovine specimen the same as you would order a part for a disabled tractor or piece of farm machinery.

We can wish the agriculture of the future to be the same as we know it today. But wishing will not make it so. More likely, within the lifetime of our grandchildren, they will look back on our generation and remember antiquated things as we do when our grandpa replaced one of his teams of mules with a Farmall A tractor.



### Saturday, April 11

3d Annual John Deere Antique Plowing Demonstration, Ron Boyer Farm, Hereford, 9 a.m. Sunday, April 12 Faster

### Monday, April 13

Management Intensive Grazing 4-H Day Course, Holiday Inn,

Clarion, 8:30 a.m.- 9 p.m., thru April 15.

Pa. Poultry Sales Conference, Holiday Inn, Grantsville, thru April 15.

York County Holstein Barn Meeting, Heindel Dairy Farm, Brogue, 7 p.m.

Brogue, 7 p.m. Delmarva Poultry Boosters Ban-

quet, Salisbury, Md.

Passing On The Farm Workshop,
Schoonover's Restaurant, Middlebury Center, 9 a.m.-3 p.m.

Ephrata Young Farmer meeting,
Katina Showman from 4-H,

Ephrata High School, 7:30 p.m.
Wednesday, April 15
Food Industry Conference, Pennsylvania's Opportunities For the Millennium, Eden Resort and Conference Center,

Lancaster.

Farm To Table Series, Chester
County extension office, West
Chester, 7 p.m.-8:30 p.m.

Farm and Natural Lands Trust of York County 8th Annual Meeting, Aldersgate United Methodist Church, York, 7:30

Thursday, April 16 Marketing Your Farm Market,

Kutztown Produce Auction, 7

p.m.

One-Day Youth Institute, Farm and Home Center, Lancaster, 9 a.m.-2 p.m.

Propagating Perennials, Carroll County Ag Center, Westminster, Md., 9 a.m.-11 a.m.

Xeriscaping: Hardy Succulents and Drought-Tolerant Perennials, Carroll County Ag Center, Westminster, Md., 7 p.m-9 p.m.

Establishing Trees In Urban Areas Seminar, National Institute For Environmental Renewal, Mayfield.

Berks County Conservation District Banquet, Berks 4-H Community Center, Leesport, 7 p.m.

Video Conference On Nutritional Supplements, originating from Iowa State University and downlinked to Bradford County extension office, 10:30

a.m.-5 p.m.

Manor FFA Awards Banquet,
Penn Manor High School, 6:30
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To Harvest Ryelage
With this spring's unusual

Now Is

The Time

By John Schwartz

Lancaster County

Agricultural Agent

warm weather, rye is maturing very fast, according to Glenn Shirk, Lancaster County Extension Dairy Agent. If you are planning to harvest rye as ryelage, it should be harvested very soon.

Once rye starts shooting heads, dry matter yields increase considerably, but feed quality drops rapidly. So, check your rye fields now to determine if they are ready to harvest as ryelage.

### To Be Aware Of Rabies

There seems to be an increase in the number of rabies cases this year, especially in northern York County. Raccoons are by far the most common carrier. Other carriers include fox, skunks, bats, groundhogs and possums.

Pennsylvania law requires all pets, including dogs and cats, to be vaccinated for rabies. An infected animal may act dazed or disoriented or may appear ill. A wild animal that approaches people, especially in daytime, is a suspect for rabies. Parents need to remind children they should not go near animals they do not know, especially wild animals no matter how cute they look.

If you see a strangely acting animal, stay clear and do not try to capture it. Call 911 or your local police department. If a human is attacked by a wild animal, call your local health department.

Remember, rabies is a deadly disease that needs prompt attention.

# To Evaluate Winter Wheat Stands

While most wheat fields look good at this time, some fields should be evaluated to determine if their potential production is worth keeping, according to Robert Anderson, Lancaster County Extension Agronomy Agent. If stands are thin, total production will be reduced.

To check the potential production of a wheat stand, determine the length of row needed to equal one square foot. To do this, divide 144 by the row width in inches. For 7 inch rows it is 20.6 inches and for 8 inch rows it is 18 inches.

After determining the length

→ FARM FORUM →

Editor,

My husband and I own and operate a 45-cow dairy farm in Susquehanna County. We also are raising approximately 40 replacement heifers.

The average age of our major

equipment is over 25 years old. Our equipment is in constant need of repair because it is worn out. There is no money for investing in new equipment let alone enough money to update

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of row needed to equal one square foot, count the number of plants in that distance at several locations in the field. Then determine the average number of plants (not tillers) you had. If you have an average of over 24 plants per square foot, the yield is near 100 per cent. If the number of plants per square foot is 18 to 21, the yield potential is 90 to 95 per cent. Once the number drops to 12, the yield potential is around



Is 'Seeing' 'Believing'?
April 12, 1998
Background Scripture:
John 20:19-29
Devotional Reading:

Devotional Reading Mark 9:14-24

I've always thought that the Apostle Thomas has gotten a bum rap' from many people who have judged him from the comfort and safety of 20/20 hind-sight. Without justification, I believe, he has been saddled with that unfortunate so-briquet, 'Doubting Thomas' and held as a negative example of how not to respond to the Good News.

Yes, I know that even before this post-resurrection encounter with the Christ Thomas had already gained a reputation for being a doubter. But did he deserve this reputation?

In John 11:16, when Jesus resolves to go to Jerusalem even though this decision fraught with danger, Thomas' response is one of both pessimism and intense loyalty and courage. In John 14:5, when Jesus assumes that the disciples know the 'way to the Father's house,' Thomas alone is humble and honest enough to confess that he doesn't know what Jesus is talking about. Are we to assume he was the only one who didn't 'know'?

We need also to consider Jesus' reactions to Thomas on these two occasions. It is not recorded that he was angry, impatient or disappointed with Thomas. In fact, his expressed doubts gave Jesus the opportunity to clarify what he was trying to say. When, at last, Thomas does understand, he is one of the most loyal disciples. So, up to John 20, I don't think he has deserved to be called "Doubting Thomas."

#### THE OTHER ELEVEN

Let us take a look at the other eleven apostles on the night when Jesus first appeared to them. Were they a group of fervent believers waiting for Jesus to appear? No, John tells us they were meeting behind locked doors "for fear of the Jews." What fears put us behind closed doors?

They were in hiding when "Jesus came and stood among them and said, "Peace be with you." Having heard those words, did they jump up and greet him joyfully? John doesn't say that. Instead he tells us that Jesus then showed them "his hands and his side." Then the disciples were glad when they saw the Lord" (20:20). Then and only then.

Notice, too, the message which Jesus brings them; "Peace be with you." Twice he says this to them because he knows that they have been without peace in their hearts (20:19,21). Shattered by sorrow and despair, they are deeply in need if the peace which the risen Lord

65 per cent. If the number is 7 or less, then the yield potential is 50 per cent or less.

Fields with a low yield potential will result in more income if planted to another crop. An early harvest of wheat as silage, hay or pasture forage crop should be done early enough to allow planting of the next crop in a timely manner.

Feather Prof.'s Footnote: "People may doubt what you say, but they will believe what you do."

bestows upon them. Is that not what we often need to hear hin say to us, too: "Peace be with you'? Most of the negativity that haunts my life comes from fear. And fear often manifest itself as hostility, faithlessness, and despair. With Christ's peace in my heart the fear doesn't stand a chance.

When Thomas enters the room where the rest are in hiding, they tell him, "We have seen the Lord!" It is then that Thomas speaks those words that have marked him through the centuries: "Unless I see in his hands the print of the nails, and place my finger in the mark of the nails, and place my hand in his side, I will not believe" (20:25)

Once again Thomas is open enough to admit his doubts; and is his attitude really all that unreasonable? What the other apostles were asking him to believe was the very thing that up until his appearance before them they had not believed either! The consequences of this belief are of the most profound nature. Jesus was crucified and buried, but he has risen from that grave and was here with us! "UNLESS I SEE...".

Their experience can open the door and point the way for us, but each of us must be able to say with Thomas "Unless I see..I will not believe." The resurrection of Jesus can mean nothing to any of us unless we too can say that in some way we also have 'seen' the Lord. The resurrection is too vital, of too great consequence, for us to accept it as a second-hand belief.

Note, then, what happened with Thomas. Jesus appears to the apostles again, but this time Thomas is with them. Instead of rebuking Thomas for his reaction to the report of his fellow apostles, Jesus invites him to actually touch his wounds. Unlike his fellow apostles on their first encounter with the risen Christ, he exclaims, "My Lord and my God!"

Still not rebuking Thomas, Jesus says: "Have you believed because you have seen me? Blessed are those who have not seen and yet believe" (20:29). Blessed are those who will be able to encounter the risen Lord without having to experience his physical wounds and presence. We do not have to 'see' Jesus physically, but we do have to encounter him spiritually and, when we have, we join Thomas in proclaiming, "My Lord and my God!"

# Lancaster Farming

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