

Crisis Will Be Too Late

Months before the Japanese bombed Pearl Harbor in 1941, two British scientists came to the United States looking for help, carrying with them a small amount of a relatively unknown drug, penicillin. The two carried away more than they had expected: not only a way to mass produce the drug to fight war infections, but also a superior strain that U.S. scientists found on a moldy cantaloupe.

Shortly after the war ended, a researcher with the Florida Citrus Commission had an idea to restore the flavor and aroma of orange juice once the fruit had undergone vacuum evaporation. That idea gave birth to the frozen concentrated orange juice industry.

Decades later came a cornstarch and synthetic chemical compound, ingredients that produced a super absorbent material—dubbed the Super Slurper—that could hold hundreds of times its weight in water. It became the liner for disposable diapers.

Then there's hybrid corn, leaner pork, xanthan gum, soft vinyl plastics, soy ink, kenaf paper and thousands of other consumer, scientific and medical products that have come out of publicly funded agricultural research.

"We impact consumers everyday in their lives." said Loretta Owens, legislative chief of staff for the Agricultural Research Service of the U.S. Department of Agriculture (USDA) as quoted in the March issue of "The Cargill Bulletin." "There aren't too many things that we didn't have a hand in."

Over the years, those contributions and consistently high rates of return for public dollars have generated little political or taxpayer opposition to agricultural research.

Yet neither has research attracted much public support, researchers say. Federal and state funding has only kept pace with the higher cost of doing research. Now, when the United States needs to pursue research and development aggresively to take advantage of increased global opportunities for agriculture, they say, a budget-cutting Congress is looking for savings in the 1995 farm bill, the omnibus legislation that will govern U.S. agricultural policies and budgets for the next five years.

"Right now there's a lot of complacency," said Keith Fuglie, an economist with USDA's Economic Research Service (ERS) who's directing a study on agricultural research. "There really isn't any food crisis.

"But what people have to keep in mind when they talk about agricultural research is that the money you put up now is going to be affecting our food prices 10, 20 years from now. Research takes a long time to do...It also takes a long time to build up an effective research system, but a very short time to destroy it."

For sure, the vast agricultural research network—including land-grant universities, experiment stations, extension offices, USDA laboratories and international centers—is far from crumbling. But, experts say, it is showing signs of stress as it responds to growing demands and changing expectations. The entire system, they contend, is underfunded and underfocused.

Dominated by federal and state governments since the turn of the century, agriculture research has in recent years gained an increasingly large contribution from private industry. While public dollars for research barely kept up with inflation, private spending is growing at a faster rate and has surpassed public funding levels. But the additional source of research money also has muddied the issues of control, focus and the fundamental mission of public research.

Social changes have also prompted shifts in research subjects. Once tied mostly to crop yields, research has greatly expanded in scope to embrace nutrition, environmental protec-



To Vaccinate For Rabies

We continue to see many cases of rabies each year. It is important that all pets, horses, and animals that come in contact with wild animals be vaccinated for rabies.

According to the Pennsylvania Health Department, unvaccinated pets, especially dogs, are the largest threat. Rabies vaccination are required for dogs and are key in keeping rabies from people.

The vaccination is required every three years. All reported dog bites are reported to the state dog warden. Of the 15 dog bites reported in Lancaster County, only two of the dogs were vaccinated for rabies.

The fine for not vaccinating is up to \$300. The vaccinations are far less expensive than the \$1,200 for human shots for rabies and associated costs of quarantine and disposing of animals.

To protect yourself and neighbors, vaccinate all pets and animals that come in contact with people. The only animals that do not contract rabies are birds, snakes, lizards, fish, turtles, and insects.

To Have Tetanus Shot

With warm weather finally here, we are able to participate in more outdoor activities. With this increase in activity, we are being exposed more to tetanus.

Tetanus-causing bacteria are present everywhere around us soil, bushes, trees, rocks, etc. Once introduced through a cut or wound, the bacteria cause a lifethreatening situation by locking the jaws.

This disease may be prevented by a vaccination. If you do not remember when you had your last tetanus shot, schedule one this week with your doctor. Review

reserves

Farm Calendar your family vaccination schedule with your doctor and make sure all the proper vaccinations are received by all family members.

If cost is a factor, many hospitals offer free or very low-cost vaccinations. Talk with your doctor and make sure everyone in your family is properly vaccinated for tetanus and other diseases.

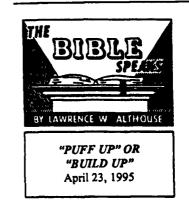
To Market Manure

Strong worldwide demand for fertilizer over the past two years has contributed to a substantial rise in fertilizer prices.

Nitrogen prices for the fall of 1994 were 25 percent higher than a year ago. Then an explosion at a nitrogen plant near Sioux City, Iowa in December added pressure on nitrogen prices.

The plant produced about two percent of the U.S. nitrogen supplies. In a good supply year, loss of that much production would have minimal impact. However, in an already tight market, the impact was significant.

This has contributed to even higher prices for spring fertilizer. These higher prices combined with good weather are creating an



"PUFF UP" OR "BUILD UP" Background Scripture: I Corinthians 8 Devotional Reading: Romans 15:1-13

In his book Christian Behavior, C.S. Lewis says that the core of Christian immorality is Pride. "Unchastity, anger, greed, drunkenness, and all that, are mere fleabites in comparison: it was through Pride that the devil became the devil: Pride leads to every other vice: it is the complete anti-god state of mind."

That's a pretty powerful statement, but I would agree. In my mind it is far easier to refrain from lying, stealing, killing and committing adultery than it is to avoid the destructive corrosion of pride. Most Christians I know avoid the sins I've listed above, but that doesn't mean they avoid pride. In fact, if they are fairly faultless in keeping the Ten Commandments, they are quite possibly sinfully proud of it. As Eugene A. Nida says, "Pride is idolatrous selfworship...Pride deifies self, even in the guise of humility."

Many Christians become proud

excellent business opportunity for farmers with manure to market.

A recent survey of major poultry producers found Lancaster County has been sold out of poultry manure for several weeks. According to Leon Ressler, extension environmental agriculture agent, following several good marketing principles will help you successfully market your manure.

First, promote your product. Advertise! It is also important to understand your competition and be honest about your product's advantages and disadvantages.

Manure's primary advantage is low cost relative to fertilizer as a source of crop nutrients. Also, some of the nitrogen in manure will be available slowly over time, supplies micronutrients, adds organic matter to the soil, and is an organic fertilizer.

Offering manure test information to potential buyers is very important. It is important to start thinking of manure as a commodity with value and that is worth managing.

Feather Prof.'s Footnote: "Leadership is reserved for those who wish to leave a legacy of excellence."

make us humble, not proud. Knowledge brings us closer to the presence of the living God and that should produce humility. But. all too often, as Paul puts it, "Knowledge puffs up" (8:1b). We have true knowledge only when it does not make us conceited.

But love has a different effect upon us. "Knowledge puffs up, but love builds up." We may use our knowledge to put others down, but love can only lift them up. Paul says,"...if one-loves God, one is known by Him" (&3). Knowing is always inferior to being "known by Him." To be "known by Him" is to be loved by Him.

LOVE BUILDS UP

The situation to which Paul is addressing himself in I Corinthians 8 is hard for us to relate to. Much of the meat that was used for offerings in pagan temples wound up being sold in the market. Some Christians were leery of eating such meat because they felt it was tainted by paganism. Other Christians said that this pagan meat didn't bother them because to them it was simply food, not pagan sacrifices. Paul is counselling the Corinthians not to buy and eat such meat if their example is likely to cause someone else to be troubled by their conscience.

I have heard this passage applied to just about every contemporary situation and I do not believe it ought to be rigidly applied beyond the problem to which Paul is addressing himself. To avoid doing anything of which my neighbor disapproves is not a solution.

Much more to the point is Paul's admonition that can be applied more widely than the eating of meats sacrificed to idols: "Only take care lest this liberty of yours somehow become a stumbling block to the weak" (8:9). It is a choice for all of us: to be puffed up or to build up.

tion, food safety and a host of other areas that appeal to urban dwellers as well.

"There's a lot of question in terms of what the public sector should be doing, who should be doing it and how it should be done," Fuglie said.

"It used to be that government scientists talked to farmers and gave farmers what they wanted," he said. "Now they have to listen to what the farmers are interested in, what environmentalists are interested in, what consumers are interested in. There's a lot more pressure on the system."

In addition, many people, even at land-grant universities, are starting to say, "Let private industry do the ag research. We'll do other things." But this kind of attitude takes away from the more unbiased opinions that can be generated through public institutions and agencies.

Let's continue to provide both public and private funding for ag research now so we can continue to develop the technology we need for practical application beyond the year 2000. To wait for a food shortage crisis will be much too late. reserveses

Saturday, April 22 70th Annual Penn State Dairy Science Club Exposition, Ag Arena, University Park, 8:30 a.m. Second Annual Marico Llama and Alpaca Festival, Tolland Ag Center, Vernon, Conn., thru April 23.

Northeast Ratite Association Seminar, Best Western Inn, Matamoras, thru April 23. Cumberland County Holstein Sale, David and Kathy Walton Farm, Carlisle. Third Annual Arabian Horse Festival, York Fairgrounds, York, 9 a.m.-4 p.m.

Sheep and Wool Day, Springton (Turn to Page 37) of what they "know"-doctrines, creeds, dogmas, and so forth. They are proud of their knowledge and disdainful of those who do not share it. Even if their knowledge leads them to the doctrinal position of admitting that they are sinners, they may be proud of knowing it. That is why Paul, in writing to the Corinthians says, "If any one imagines that he knows something, he does not yet know as he ought to know" (8:2). I think J.B. Phillips renders his passage even more clearly: "For if a man thinks he 'knows' he may still be quite ignorant of what he ought to know."

KNOWLEDGE PUFFS UP What is it that we "ought to know?" The answer: how little we do know. Knowledge should Lancaster Farming Established 1955 Published Every Saturday Ephrata Review Building 1 E. Main St. Ephrata, PA 17522 --by-Lancaster Farming, Inc. A Steinman Enterprise Robert G. Campbell General Manager Everett R. Newswarger Managing Editor Copyright 1995 by Lancaster Farming