

Farmers Need New Perspective, Says Ag Expert

GREENVILLE — Eastern North Carolina farmers, reeling from several stiff punches to the midsection, need a pause to reflect and to get a new perspective for the future, an agriculture leader announced.

Raymond D. Meiggs of Tarboro, chairman of the 21st Century Agriculture Planning Committee of Eastern North Carolina Chamber of Commerce, says farming now stands at a crucial crossroads in the region and some sound planning is needed.

Meiggs heads a committee of specialists that has been meeting since April to plan a project to provide farmers with an opportunity to try to regain their equilibrium.

It is hoped that at least 500 Eastern North Carolina farmers, the kind that actually till the soil, will be on hand for the results of the committee's work, a 21st Century Farming Conference to plan farming's future to be conducted at McKimmon Center in Raleigh all day on February 8, 1983.

It is also hoped that another 500 persons who make their living related to agriculture, will also be on hand.

"This will be an important conference," Meiggs said. "While we will have some significant speakers like Gov. Jim Hunt, President Bill Friday of UNC, and a top official of the Federal Land Bank, two other portions of the program promise some significant developments," he observed.

Meiggs said the first of these will be when a panel of N.C. State University professors reports on findings of a special task force that has been at work to find some new long range promise for agriculture, and the second will be discussion sessions in which farmers will

have an opportunity to bring forth some of their own ideas as to how to seek a new and more stable course for the future.

Serving on the committee with Meiggs have been

representatives from the Governor's office, the N.C. Department of Agriculture, the N.C. Department of Commerce, the Agriculture Extension Service at N.C. State, the N.C. Agribusiness Coun-

cil, the East Carolina University Regional Development Institute, the Eastern Chamber, and the Washington Chamber of Commerce.

The idea for the conference

was spawned in the Agriculture Development

Council of the Washington Chamber of Commerce. It asked the Eastern Chamber to take on the regional task.

Va. Coop Buys Veeco Power Station

Virginia Electric and Power Company and Old Dominion Electric Cooperative on December 28, signed a final agreement under which Veeco will sell portions of its North Anna Nuclear Power Station to Old Dominion.

After almost eight years of discussions and negotiations, officers of Veeco and Old Dominion have signed a final agreement, which calls for the cooperative to purchase 12.5 per cent of North Anna Units 1 & 2, 12.5 per cent of the Nuclear fuel and common facilities at the power station, and a portion of spare parts, inventory and other support facilities.

Based on a mid-1983 closing, Veeco will receive approximately \$265 million, of which about \$208 million will be paid at closing.

In addition, Old Dominion will be responsible for 12.5 per cent of all future expenditures on the facilities and for its share of operating costs.

The agreement is subject to the approval of the approval of the Virginia State Corporation Commission, The West Virginia Public Service Commission, the U.S. Nuclear Regulatory Commission (NRC), The Federal Energy Regulatory (FERC) and the Rural Electrification Administration (REA).

Veeco and Old Dominion anticipate that the agreement signed yesterday will receive the approvals of these

regulatory agencies by mid-1983. The agreement, which has been approved by the Boards of Directors of both Veeco and Old Dominion, will be filled with all five agencies in early 1983.

The purchased capacity from North Anna will provide about 20 per cent of Old Dominion's power needs. The cooperative will continue to purchase nearly all of its remaining power requirements

from Veeco.

Old Dominion, a power supply cooperative headquartered in Richmond, is responsible for obtaining power for its 15 member cooperatives.

Ernest M. Jordan, Old Dominion's executive vice president, said the agreement would benefit Virginia's cooperatives by helping to provide their future generation requirements at lower

costs.

Veeco president William W. Berry, who signed the agreement on behalf of the company, said Veeco will use the Funds it receives from the sale to meet future financing requirements. As a result, Berry said, "All of our customers and stockholders will benefit from this transaction."

Science Making Progress With Genetics

by Susan Talanda
In December, scientists from four U.S. universities announced they had succeeded in transferring a genetic trait of rats into mice.

After transplanting a regulatory gene (one which regulates rat growth) into fertilized mouse eggs, the growth trait of the rat was passed on to some of the mice.

"This study is excellent," said Dr. John G. Scandalios, 1982 president of the American Genetic Association. By manipulating regulatory genes, scientists may one day be able to produce crops and livestock with ideal traits, such as faster growth, higher yields and more resistance to parasites or adverse climates, he said.

Scandalios, who is head of the genetics department at North Carolina State University, has recently discovered two new regulatory genes in corn.

The transfer of the rat growth hormone gene points out a crucial issue in genetic engineering, he said. The desirable growth trait of the rat will appear in some of the mice, but the scientists could not predict or control the growth rate of the mice.

"Putting a useful gene into an organism does not

guarantee a useful change," Scandalios said.

We may be able to transplant a gene which triggers insulin production in diabetics, but questions remain. How much insulin would be produced? When will the insulin be produced and will it be produced in the right place?

"With regard to plants, much noise has been made about transferring genes to make corn that needs no fertilizer. But will that trait be expressed at the proper time, in the proper place?" Scandalios said. "In order to regulate growth and other traits, we have to understand how the cell's genetic activity is regulated."

In his studies with corn, Scandalios began with the basic questions: How does a plant cell know whether to become a leaf cell or a root cell? How does the simple plant cell know when to become a more complex root cell? And what determines the number of root cells produced?

After years of research, Scandalios and his associates have discovered temporal regulatory genes in corn. He believes these genes dictate the time certain products in corn seed cells will change,

causing the corn seed to sprout or bringing about other changes in seed metabolism.

Temporal regulatory genes also play a part in determining the number of cells that will undergo such changes and develop specific traits.

Scandalios has pinpointed a second regulatory gene in plants, which he tentatively refers to as "topogene." It is too new to have been christened with an official name, he said.

"Topogenes" (or processing genes) tell the protein products of other genes where to go in the corn cell. The location of these gene products in specific cell compartments determines whether the simple corn cell will function properly as a leaf cell, a root cell, a stem cell, etc.

Scandalios now is studying how regulatory genes give instructions, so scientists can control the expression of gene traits in the future.

His theory is that regulatory genes may be making "macro-molecules" which carry signals to other genes. These other genes recognize the signals and respond, triggering changes in the cells.

But what if these precise cell changes are disrupted? What happens if the wrong signals are given or the right signals are misinterpreted?

When cell changes are not properly regulated in humans or in animals, birth defects, cancer, abortion or any number of genetic disorders can result, Scandalios said. In plants, the result may be abnormal plant or seed growth, premature aging or poor physiology.

If scientists can eliminate or correct these abnormalities at a genetic level, they will be dealing with abnormalities at their source, not just treating the symptoms, Scandalios said.

Scandalios hopes to gain insight into abnormal plant growth by studying the temporal regulatory gene (CAR¹) in corn. The CAR¹ gene programs the amount of catalase enzyme. (CAT¹) produced by the CAT¹ structural gene at a specific time during development of the corn plant.

By mutating the structural genes and varying external signals such as light, temperature and hormones, his research team will try to disturb this process and discover how it works.

Since catalase enzymes are found in all forms of life, Scandalios' findings could have applications for human as well as plant and animal growth.

"From the development of hybrid corn to modern techniques for detecting diseases, genetics has affected human society more than any other science," he said. "We are progressing so rapidly, there's no telling what we may discover in the next five to 10 years."

Belk Tyler
downtown edenton

JANUARY & sale & clearance

NOW IN FULL SWING

DRASTIC REDUCTIONS IN EVERY DEPARTMENT!

- BOYS' • GIRLS'
- MEN'S • LADIES'
- SHOES
- ACCESSORIES
- HOUSEWARES
- BEDDING AND MORE!

SOME ITEMS REDUCED UP TO

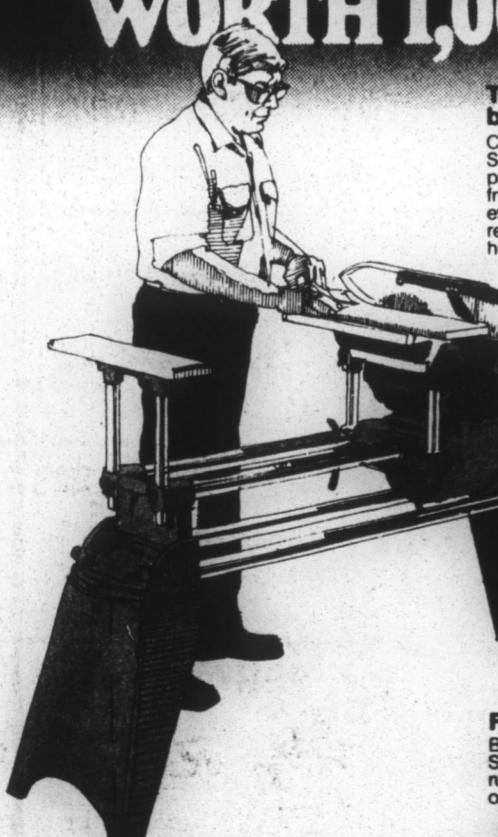
60% OFF

Shop Monday Through Thursday 9:30 a.m. Until 5:30 p.m., Friday 9:30 a.m. Until 9 p.m., Saturday 9:30 a.m. Until 6 p.m. — Phone 482-3221

CHICKEN MANURE
25¢ 119129W
For Sale—Bag or Bulk. Will consider delivery. Call Emmett Winborne - 221-4204.

Limited Time DOUBLE ANNIVERSARY SAVINGS!

When it comes to improving your woodworking, ONE DEMONSTRATION IS WORTH 1,000 WORDS



The Shopsmith MARK V can help you become a better woodworker. Come to our demonstration and see for yourself how the Shopsmith MARK V system gives you the accuracy and precision you need to create beautiful gifts for family and friends or craft fine furniture and cabinets from scratch—even if you've never worked with wood before. You'll get results that a professional would envy because Shopsmith helps you do it right the first time.

In no more space than a bicycle, the MARK V gives you the five most needed workshop tools:

- 10" Table Saw
- 16-1/2" Vertical Drill Press
- Horizontal Boring Machine
- 34" Lathe
- 12" Disc Sander

See the MARK V in operation and discover the joys and pleasures of working with wood — the Shopsmith way!

Come to our FREE demonstration and learn about . . .

- . . . terrific Double Anniversary Savings . . .
- . . . exclusive ShopSurance™ protection . . .
- . . . and no down payment and convenient terms on a MARK VI

FREE Gift for Attending!
Bring along the coupon below and claim your FREE Shopsmith Woodworking Gift — a 4' self-adhesive metal ruler — after the demonstration. Mount it on your bench top, on the wall or wherever it's most handy.

Shopsmith Inc.
The Home Workshop Company

Quality Woodworking Tools made in the U.S.A.
©Shopsmith, Inc. 1982

SEE LIVE DEMONSTRATIONS DAILY AT:
Southgate Mall
W. Ehringhaus Street
Elizabeth City
Wed. Jan. 12
thru
Sat. Jan. 15

ATTEND THIS DEMONSTRATION AND RECEIVE YOUR FREE WOODWORKING GIFT!

Bring this coupon to the demonstration and receive a 4' self-adhesive Ruler FREE! Just stop by and see the most versatile woodworking tool in operation. You're under no obligation! No purchase necessary.

Name _____
Address _____
City _____
State _____ Zip _____
Phone () _____
 I currently own a Shopsmith power woodworking tool. Dept. HN28

KILLS FLEAS, TICKS!



Sergeant's SENTRY II Flea & Tick Collar