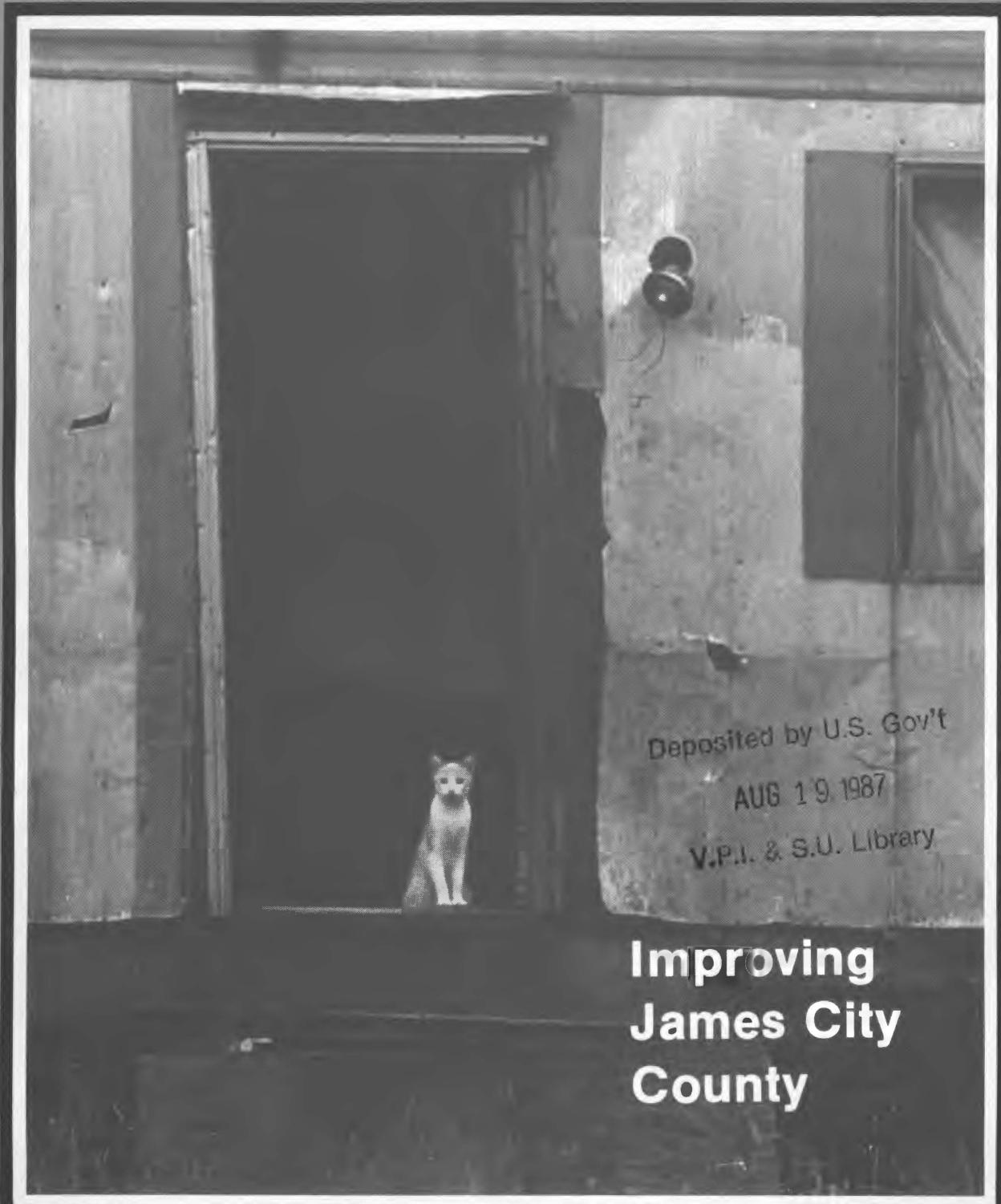


VIRGINIA EXTENSION

THE VIRGINIA COOPERATIVE EXTENSION SERVICE MAGAZINE

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COMMENTARY



Mitch Geasler

M. R. Geasler
Vice-Provost
Extension Division

Saving the Whales

Recently, I experienced a very difficult but challenging interview with a very well prepared reporter. He came to the interview armed with questions that dealt with every difficult issue being faced by Cooperative Extension.

After an extensive discussion, the reporter put away the note pad and pencil and said, "Mitch, the system has faced and is still facing some difficult challenges. Do you ever feel like you are trying to drag a beached whale back into the ocean?"

I often think about that question. It recurred to me when the staff and I dealt with several very difficult challenges which some may feel are not issues, let alone something that's difficult to resolve.

I am referring to some of the changes that we are making in program content. These changes are a result of the Joint Legislative Audit and Review Commission (JLARC), the nine-block plan, and of interaction with decision makers. In addition, all segments of Virginia Cooperative Extension's leadership concur, feeling strongly that we must change the direction of programs so that they will have a research-based orientation.

I have to quickly add that most of our state staff have easily adjusted to the changes in the system. They have worked very effectively with local clientele and decision makers. Throughout the system, there has been significant progress toward issue- and need-driven programs.

We have a few who have not responded to these changes, however. They feel the program content in their respective units should be based solely on what the local clientele desires. They have not developed leadership roles in guiding program direction. Instead, they are content to deliver programs that go in the opposite direction from those

suggested in the various reports and information we have received from decision makers.

This attitude reminds me of a speech I recently heard delivered by a prominent home economics dean. She said that when she taught home economics in the seventh grade, her students would have been content and happy to have made fudge brownies all year. It was her role as an effective educator to make those students understand that there was more material to be learned than just mastering the production of fudge brownies.

The decision makers have been very clear in the message they have sent to our Extension system. Failure to pay attention to this message could cost all of us dearly.

We rapidly are approaching a major decision period that will affect our budget. I want to be able to stand before the General Assembly and to confidently tell its members that the Virginia Extension system is delivering issue- and research-based programs.

As we have said many times in the past, the appropriate role for Extension professionals in satisfying the wants of clientele is as coordinators of volunteers who will teach the programs. Your support of this effort is appreciated.

Failure to make this transition throughout the system could have severe consequences. As you may be aware, a beached whale, for some unknown reason, seldom lives even if it is returned to the ocean. I do not perceive our system as a beached whale, but the result could be the same.

It is not out of boredom that the leadership of Extension has accepted the challenge. Rather, we feel that we have explored the situation, evaluated the consequences of inaction, and determined that we must act. Your cooperation is needed if we are to be successful.

VIRGINIA EXTENSION

The Virginia Cooperative Extension Service Magazine

VIRGINIA EXTENSION

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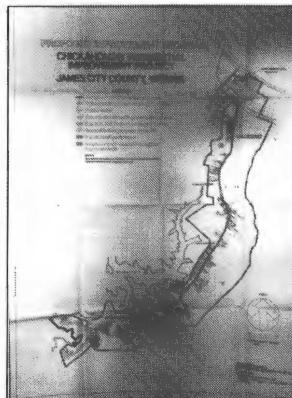
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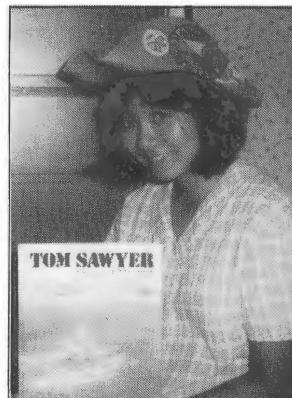
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FRONT COVER

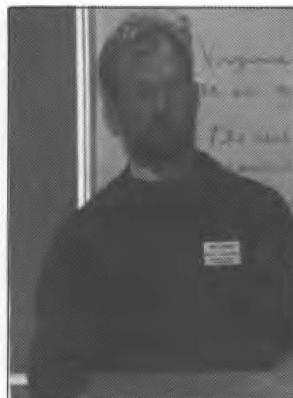
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INNOVATIONS

RESEARCH TO BENEFIT VIRGINIANS



Virginians, in the not too distant future, won't have to spend most of their summer Saturdays mowing the lawn. Virginia Tech turf specialists are working to develop growth regulators that will severely reduce the rate that grass grows.

"Growth regulators currently exist that would reduce mowing requirements to once every six or seven weeks," says John R. Hall, Extension turf specialist. Already in use along Virginia's highways, the growth regulators need more work before they'll be ready to use on home lawns.

"The material doesn't work on all species of lawn grasses and most lawns are a mixture of grasses," Hall explains. "We're fine-tuning the materials to determine what species are regulated and at what rates."

The Tech specialist foresees a great demand for the growth-controlling substance. "Within three to five years, we will see growth regulators being offered to the homeowner which will reduce mowing requirements to about once every six weeks," he predicts.

□

During artificial insemination (A.I.), twenty-five million sperm are transplanted into a cow. However, only a few hundred sperm

survive to reach the site of fertilization, a ratio that decreases fertilization and causes Virginia dairymen some concern.

Ray Nebel, Virginia Tech Extension dairy scientist, is working to increase that survival rate with a unique time-release capsule. Originally developed at the Medical College of Virginia to hold insulin for diabetics, the capsule could make timing a less critical factor in dairy cattle insemination.

"The insemination straws used in the A.I. procedure would contain both encapsulated and non-encapsulated semen," Nebel explains. "Although the cow would be bred only once, semen would be available both now and later, as if you had bred her three or four times."

The technique will be no more work for the farmer than normal A.I. and should increase costs only slightly since the procedure is fairly simple and inexpensive.

Nebel hopes to see at least a 5 percent increase in conception rates with the capsules. He is presently testing different types of capsules and plans conception studies to see how many cows can be bred from the capsules versus non-encapsulated semen. "The next step will be a field study, so it's probably about three to five years from actual on-farm use," he says.

□

Agricultural education in Virginia recently has received a boost in the form of a new computer network. Developed by Virginia Tech agricultural education professor William Camp, the network provides telecommunication between agricultural teachers across the state.

The network stems from work that Camp began in 1982 when he developed computer software for the agricultural education field. As

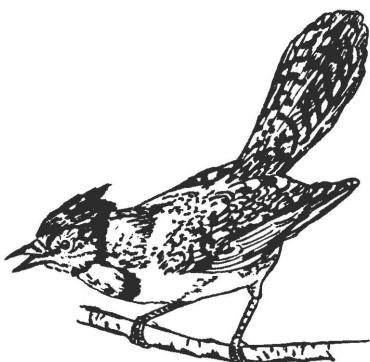


the work progressed, he came up with the idea of combining software with a computer network that would link vocational agriculture teachers across the state.

He invited five teachers from different sections of Virginia to attend a demonstration of the network. After the session, each was given a phone modem to use for communication on the network. The teachers only have to pay for the phone lines to use the network. That is the incentive that Camp hopes will attract more teachers to the system. Currently, more than twenty teachers have joined the network.

The network, the only free system of its kind in the state, does not represent an end in itself, Camp says, but is a means to reach a much larger goal. He wants to see agricultural education make the latest computer technology an integral part of the teaching process. As teachers become more familiar with computer networks, he hopes they will use the larger and more sophisticated commercial networks.

□



The loud, thieving blue jay may one day help in recovering land damaged by surface mining, drought, and erosion, Virginia Tech studies show. Blue jays carry hundreds of acorns and other nuts many miles across cleared fields and roadways, then hide them under soil or grass. They choose sound acorns that are most likely to sprout and grow.

Cached acorns not eaten by birds or animals may grow into trees. Blue jays, in deciding which nuts to store where, may help determine the structure of ecological communities, say two Tech researchers, W. Carter Johnson and Curtis Adkisson, associate professors of botany and zoology, respectively.

Because small, nut-dispersing animals are hindered by farmland, highways, cities, and other barriers, jays probably are the only long-distance dispersers of the nuts and play an important role in reforestation. They may even have dispersed oak trees to young, scattered patches of oakless forest after the Ice Age.

The researchers are looking at ways to use the oak/jay relationship to help promote the growth of trees in disturbed ecosystems. This includes providing wooded fence rows to protect the blue jay and leaving large foraging patches with a good supply of nuts.

□

Virginians can have clean laundry without phosphate detergents. A Virginia Tech study into what effect the banning of phosphates from detergents by the Virginia General Assembly will have on clean washes shows that

there is an effective alternative in "unbuilt" liquid detergents. The study suggests consumers may want to avoid carbonate-based detergents as substitutes.

The study, conducted by Rebecca P. Lovingood and Janice E. Woodard in Tech's College of Human Resources and funded by the Virginia Water Resources Research Center, compared two brands of each of three types of detergents—phosphate-built, carbonate-built, and unbuilt. The detergents were tested in both soft and hard water.

"The study indicates consumers can expect good laundering performances with the present formulations of unbuilt liquid detergents," says Extension specialist Woodard. "On the other hand, consumers may find that carbonate-built detergents will give poor results because the sodium carbonate in this type of detergent reacts with minerals in the wash water and deposits a white, powdery residue on washed articles."

Unbuilt liquids can be identified by the absence of a "builder", or water softener, on the list of ingredients on the package label. Carbonate-built detergents include sodium carbonate among the ingredients.

Phosphates increase the incidence of phosphorus in sewage. It is excessive phosphorus which increases plant life and, in turn, decreases oxygen. Decreased oxygen can lead to fish kills and other detrimental occurrences. That is why Virginia followed the lead of Maryland and the District of Columbia in banning phosphates, hoping the ban will assist in the program to improve the water quality of the Chesapeake Bay. "Improvements in sewage treatment plants will still be needed for any long-term benefit," Woodard says.

□

A computer program has been developed by agricultural engineers at Virginia Tech that identifies highly erodible land, helps farmers implement conservation measures, and, in the process, makes the Chesapeake Bay a little cleaner.



A six-year study by the Environmental Protection Agency identified serious local and bay-wide problems, including nutrient enrichment from agricultural land. The Virginia Division of Soil and Water Conservation has the responsibility for developing and implementing the program for the cleanup of the bay.

The division asked Virginia Tech to create a data base and calculate the pollution potential. Tech's agricultural engineers developed a Geographic Information System that identifies critical areas and helps evaluate alternative uses for the sites in question as well as alternative farming practices for erodible agricultural land.

Data include soil type, elevation, land use, water bodies, and watersheds. Pilot cost-share programs in the nineteen counties of the 3.5-million-acre York and Rappahannock drainage basins have yielded enough information so the Soil Conservation Service can identify highly erodible land and farmers can develop conservation plans in compliance with the 1985 Farm Bill. This enables the Division of Soil and Water Conservation to determine where its funds can be placed most effectively.

As the database nears completion in the Shenandoah Valley and Colonial and Piedmont Soil and Water Conservation districts, Richmond County planners plan to use it for coastal zone management.

□

Instilling Pride of Ownership Is the First Step



Virginia Gazette Photos

The lack of quality housing continues to be a problem in Virginia, especially for those who have low or moderate incomes. Many Virginians are living in substandard houses because they can't afford to purchase anything more suitable and are unaware of what can be done to improve what they have.

"It's a statewide problem," says John W. Kirby, Extension specialist in housing and structures at Virginia State University. He is working with Extension agents across the state to set up programs to improve living conditions for thousands of Virginians. And, like a group of blocks standing in a row, there is always another challenge waiting for him when he gets by the first one.

James City County is a good example of this "block" effect in the continuing effort to improve quality housing to all. The local Extension office, headed by agent Shirley M. Willis, began working with a local subdivision, Forest Glen, near Williamsburg that "rapidly was turning into run-down housing." Houses that were less than twenty years old looked as if they had never received any care or maintenance. And many of them hadn't.

The approximately 150 residents in the subdivision did not have any pride of ownership and those who did lacked the skills and know-how to make improvements and could not afford to hire someone to do them.

Consequently, the number of vacant houses was rapidly growing and the houses were showing the effects of neglect and vandalism. Extension, with the help of county administration funding, set up shop in a vacant house in the subdivision and began, using an Extension technician, to conduct one-on-one assistance and to conduct workshops on simple home repairs.

The program has turned the area around. The migration of residents has ceased, those homes that are for sale find ready buyers, and a builder has built some new houses. The neighborhood today is little different from many modest groupings found around the state.

The effort, which got national awards for Willis and Extension from the National Association of Counties and the National Association of Extension Home Economists, also involved many human service organizations. Social Services, Community Development, the health department, Community Action, the transit authority, and local school officials worked together to educate the residents of the area.

"The whole idea," Kirby says, "is to improve the home environment through a series of educational programs. This worked well in Forest Glen. The true challenge will be if it works well in the Chickahominy area."

The Chickahominy area is a nearly two-mile strip



Going over plans to improve the Chickahominy area are, from left, James City County Extension agent Shirley M. Willis, county community services director Anthony Conyers Jr., and Extension housing and structures specialist John W. Kirby.

that has about 150 residences that are located along Chickahominy road near the Little Creek Reservoir in the county. Extension and the other human service organizations in the county are working closely with Anthony Conyers Jr., county director of community services, in starting programs that will result in an improved neighborhood.

"We want to teach the people how to help themselves," Conyers says. "If you give them everything, they will not benefit. But if you teach them how and why it is necessary to have a better environment and they make the changes, then you have accomplished something."

The Chickahominy challenge is much greater than that found in Forest Glen. Some of the housing was not up to health standards when built and some units do not have any water or sewer hookups.

Conyers notes that some of the housing is being replaced but that some can be brought up to standards through renovation. All connected with the program are optimistic about receiving a \$700,000 community development block grant later this year. The grant would greatly accelerate the renovation program.

Currently, Housing Partnership, a non-profit organization, is assisting in upgrading the housing. Ten homes are being considered for renovation through a \$160,000 Farmers Home Administration housing preservation grant that is aimed at improving conditions.

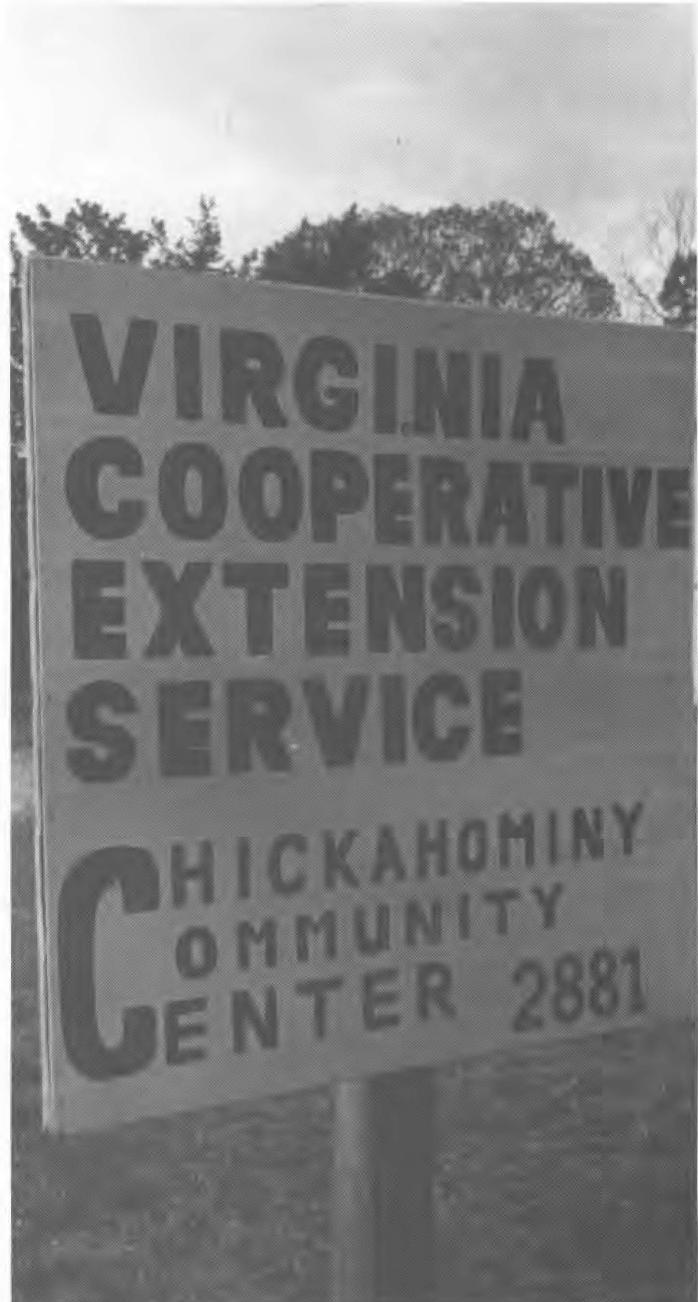
Extension, Willis says, is approaching the residents through a variety of educational programs concerning lawn care, nutrition, clothing construction, home repair, and other similar projects. Two technicians are establishing programs and recruiting volunteers; one is funded by Virginia State Extension and the other through county funds.

Chickahominy Baptist Church donated one of its buildings as a rent-free community center. This "godsend" provided the program with a base of operations from which program leaders can reach out into the community. And they are reaching out.

The center is the headquarters for a local women's club that Extension helped organize. Each week, there are adult skills classes, 4-H meetings, tutoring sessions, a children's story hour, and various church programs in the building. Thirty-four community residents registered to work toward their high school diplomas in the tutoring classes.

Willis and Kirby agree that the Chickahominy project presents more challenges than did the one at Forest Glen but none that cannot be overcome. They point out that the educational programs to raise the awareness level of residents are the same. Some of the situations are more difficult but "nothing can be done until you build the people's self esteem so that they will begin accepting the other programs." That process, they say, is well under way. □

Bill Burleson Photos



An area resident made the community-center sign.

Henrico Extension Takes As Well as Gives Advice

Often, Extension agents in a county wonder if they are effectively reaching all of the residents in their jurisdiction or if they could increase the visibility of Extension. The process generally ends with wondering, however, because the agents are immersed in day-to-day operations.

In Henrico County, the agents turned to their advisory council for assistance in looking at their operations to see if there were ways that Extension could become more visible to the public.

The committee's first recommendation was to combine all of the individual agents' newsletters into a unit newsletter that would be mailed monthly to more than three thousand county residents. This combined newsletter would cover all aspects of Extension—agriculture, urban horticulture, home economics, 4-H youth, and community resource development.

Then, the sixteen-member committee, headed by retired director of Virginia consumer affairs Roy Farmer, decided to go outside its membership for additional public relations assistance.

The advisory committee enlisted H. Randolph Farmer, vice president for public relations at Lawyers Title Insurance Corporation; Joseph C. Hughes, retired senior vice president for administration at Lawyers Title; and Jeanette Wagner, a resident knowledgeable about Extension activities.

The result of the committee's efforts was a list of recommended steps that could lead to more Extension visibility.

"We know there are a large number of people in Henrico County who could use Extension's services if they were aware of them," says unit director Charles K. Curry. "We thought such a study might show us how to reach these people. In addition, this study would advise us on how to do some of our tasks more efficiently. We weren't disappointed."

The three-member committee interviewed the Extension agents and examined the unit's goals and budget to try and measure what realistically could be accomplished.

"We found, overall, that the Extension unit has an excellent public relations program," says Hughes. "Extension routinely reaches thousands of residents on a regular basis. Much of the public relations program is accomplished by just performing beneficial services. There were, however, some things that we thought could be done."

Work began almost immediately on the recommendation that Extension develop an attractive but inexpensive brochure that would reflect what the unit does in the community. The brochure could become a valuable Extension information tool if distributed widely, with water or telephone bills, for example.

Another recommendation is that Henrico Extension



Bill Burleson Photos

Joseph Hughes notes that Henrico County Extension routinely reaches thousands of residents on a regular basis.

establish a library of video tapes on such topics as lawn care and volunteer training, which could be used by the public without agent involvement.

Although Henrico County has an extensive volunteer program, with more than 100 persons helping in a variety of programs, the committee recommended that an even larger pool of volunteers be created so that agents could concentrate on the more complex problems in the community.

Another recommendation was that Extension cooperate more often with local agencies. Henrico agents currently are working with two other agencies in organizing new programs in the community.

"Most of the recommendations are not earth-shattering," Curry says. "We may have eventually discovered them ourselves. The study reinforced our aims and made us look at what we were doing. I believe it will help those in the community to become more aware of what we can do for them. The subcommittee has shown us how we can gain more public visibility while doing more work in the community."

Hughes says, "You have to remember that a good public relations program never ends, but does need periodic re-examination. As long as you remember that the persons served by Extension are the program's best spokesmen, then you will be all right."

Explaining U.S. Is No Easy Task

(Editor's Note.—The following is an article by Ann Perkins of Crozet, a freshman at Virginia Tech. Last summer, she was one of six former 4-H LABO exchange participants who took part in a special 15th anniversary celebration of the program. She traveled throughout Japan, stayed with a variety of Japanese families, and participated in numerous discussions about the United States. A Japanese delegation also visited this country for three weeks in connection with the anniversary. Upon her return from her two-month visit, she was asked to comment about the experience. This is the result of that request.)

I learned twice as much during last summer's visit to Japan as I had learned during my first trip to that country four years ago. Some of this increased knowledge could be attributed to the fact that I was four years older and I spent twice as much time in Japan as I did on my first visit.

But there was more. This time, I had the responsibility of representing my country as a whole. Four years ago, I was representing the States, but as a citizen of Virginia. Last summer, six other people and myself, each from a different state, attempted to represent the United States as a whole.

It was a difficult but important job. I learned to appreciate this importance as I met the Japanese people. One big difference between the people of the two lands is that the Japanese are, for the most part, from the same heritage and background while we Americans come from a variety of countries and have become mixed throughout the country.

This mixed background and heritage was very interesting to the Japanese. But it made it difficult for Americans like myself to express an "overall American view" on anything. One can find in the States that the focus is on the individual rather than society.

Every day, my partner, Jeff Miller from Michigan, and I were asked questions on education, relationships, cultures, and other topics. Quite often, we did not agree on the answers. We tried not to confuse our Japanese friends by explaining we came from different places and backgrounds and that Americans do not easily have one answer to every question because they (the American people) are so different.

Language problems compounded some of these explanations about why we did not always agree. But we, as "Youth Caravaners", had an obligation to present our views as honestly as we could while trying to explain how other Americans might view the subject. It took a lot of time and consideration to get the Japanese to understand our American way of thinking and living. Although difficult at times, these discussions helped me to learn a lot about Japan and my own country.



Bill Burleson Photo

Ann Perkins visited every major city in Japan during her two-month LABO visit.

One item occurred to me during my visit. Because they are one people with a common culture, it is important for them to study and continue respect for the past. Without the study of past customs and art, their culture would be forgotten. Many young Japanese do not share this feeling and are more interested in studying English and America than in understanding their own culture.

This reminded me that I must continue to understand my culture so I can share it with others. Some of the students that I met would make an effort to show me "Japan", but some would not help me find answers to some of my questions because they do not like "Japanese style". I felt that I did not come to Japan to find America, but in some of the Japanese that is what I found.

I understand that it is important for different people to learn to communicate and to understand each other, but they also must understand themselves.

I have heard that some day there will be no countries. But until then, we should learn about ourselves by sharing and trying to understand each other. Understanding and peace may come from such efforts.

For this reason, the LABO and 4-H exchange has played, is playing, and will continue to play an important role in world understanding. The sharing of ideas and homes and making friendships which could last a lifetime are what made the 1986 4-H Youth Caravan a success. ☐

PEOPLE

Josephine Smith:

A Lover of 4-H

Thirteen years ago Extension enrolled Florence and Clinton Smith and their nine boys and six girls in the Expanded Foods and Nutrition Education Program (EFNEP). Today, Extension is still receiving benefits from that initial contact with that Southampton County family.

"We called the program a Family Affair in 4-H," recalls Southampton Extension agent Sarah H. Walden. "It turned out to be an unusual involvement because the boys were as interested in foods and nutrition as the girls. The program also led the family members to totally commit themselves to 4-H."

"The 4-H program and Extension are continuing to receive assistance from that family today," Walden says.

Josephine Smith of Capron is one of those children who continued her involvement with 4-H long after the Smith family completed the EFNEP program. She started as a 4-H'er and rapidly expanded her expertise in foods and nutrition. She has worked her way through the 4-H ranks as a member, a junior 4-H leader, and an adult leader. Today, she is considered one of the driving forces in the county's 4-H program.

She helped organize and is the volunteer leader for the Capron 4-H Club. She not only serves as a 4-H leader in the community, but she has been a counselor for state 4-H Congress for eight years, chaperoning girls from the Southeast Extension District. She also has been president of the local, district, and state 4-H Leader Associations. She has worked on



Josephine Smith loves 4-H.

numerous planning committees, such as serving as 4-H fund-raising chairman for the county, helping out with the county fair, and coordinating a 4-H trip to King's Dominion.

She presently is on the Southeast District 4-H advisory board and the Southampton Extension advisory committee and is in her third year as a member of the Virginia Extension Advisory Board. She is impressed by how the state advisory members, coming from different backgrounds and sections of the state, give due consideration to all suggestions to improve Extension programming.

Her efforts have not all been in Virginia. The 4-H All Star has attended national 4-H Congress in Chicago. She also has attended the Leader's Forum at the Georgia 4-H Center in Rock Eagle, Ga.

Her involvement with 4-H is not unusual in her family. "The 4-H program is a good one. The seven other members of my family who

were 4-H members have not forgotten the organization. Clinton, who teaches at the high school, serves as a 4-H volunteer for camp and in other capacities when needed, such as at the 5-Star Camp for handicapped youth. My sister Rosa still serves as a 4-H leader while my sister Florence is also a leader. My brother Emmett serves as a leader and also as a judge at the county fair."

Josephine's mother still serves as a transportation leader since her thirty-three-year-old daughter has not yet learned to drive. In fact, the lack of a driver's license is one of the things that makes her record of accomplishment so remarkable. It is not easy to get around without driving a car when living in a rural county. And when your obligations are across the state, the problem of transportation becomes more acute.

One of Josephine's current objectives is to see one of the members of the Capron 4-H club become a state winner and win a trip to the national congress in Chicago. So far, the best has been a third in the share-the-fun competition.

"We have some dedicated young people in the club, with a variety of interests. I'm sure one of them is going to make it soon," she says grinning. And if a member does get to Chicago, Josephine will probably be there cheering.



Josephine Smith talks with Southampton unit Extension secretary Janice Foulk.

C.B. Slemp:

A Special Preacher

"Coal is not forever." If you live in one of the seven coal-producing counties of Virginia and accept that statement, then you are ripe to become a disciple of the "gospel according to C.B."

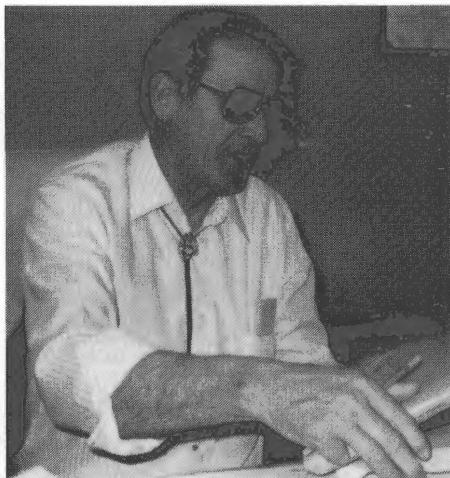
It is a simple message. Southwest Virginia is one of the ideal spots in the world in which to live, work, and play. But, if you want to prosper there, then there has to be planning and budgeting for the future. It is a gospel in which C.B. Slemp believes and is one that he preaches at every available opportunity.

It is that gospel which led the Lee County native to wander into the office of a Virginia Tech official in 1979 and begin expounding upon how something must be done in the strip-mined areas of Southwest Virginia to save the land and to provide jobs for future generations. Slemp found a willing listener and within a year Virginia Tech's Powell River project was a reality.

Slemp, who at the time was land manager for Penn Virginia Resources Corp., believed in practicing what he preached. He convinced his employer to donate 400 acres of its land just north of Norton and \$250,000 to research land reclamation. The project got its name from its location at the headwaters of the Powell River.

The project has advanced from one that looks primarily at reclaiming surface-mined lands to one that examines other actions that might improve the quality of life in the coal fields. The research done under its banner now reaches from that small initial location to all seven coal-producing counties and involves not only Virginia Tech but all public colleges in the region. It is a true example of education, industry, and government working together for the betterment of the citizens in a region.

The project has shown a staying power that has improved its cred-



Bill Burleson Photos

C.B. Slemp is optimistic about Southwest Virginia's future.

ibility among regional residents. Too many researchers have approached them with great plans to improve the quality of their lives, only to return to the places from which they came after a year or two. The Powell River Project people have practiced what they preached, and now their budget supports more than two-dozen research projects.

Slemp, now a vice president for land management at Penn Virgi-



C.B. Slemp explains research at the site to a mine company official.

nia, loves the land, the region, and its people. "I have always felt that you can influence change through research and education," Slemp says.

Slemp's family has been associated in some way with the coal industry for at least two generations. His father, who had to take a disability retirement from the railroad, farmed in Lee County near Big Stone Gap. Slemp, the youngest of six children, remembers how the family would go from coal camp to coal camp during the summer selling vegetables. He remembers taking scrip, which the coal companies paid instead of money, and spending it at the companies' camp stores.

He is quite proud of the fact that he and his two brothers and three sisters received post-high-school educations, and that three hold master's degrees. Slemp holds a bachelor's degree in agricultural education from Virginia Tech and a master's degree from East Tennessee State University.

Slemp's belief in education is not surprising. He taught vocational agriculture in Scott and Lee counties for more than twelve years and spent more than four years directing the vocational agriculture program in Lee. He joined Penn Virginia in 1979 as an audit clerk and received several promotions until he was named vice president two years ago.

Married to the former Shirley O'Quinn of Buchanan County, Slemp is the father of two daughters, Sabrina Groseclose of Wise and Martha, an eleventh grader at Dryden High School. A member of the First Methodist Church in Pennington Gap, he is or has been active in the Lee County Industrial Development Authority, the Daniel Boone Soil and Water Conservation District, the Lee County Education Association, and the Southern States Farm Cooperative.

When not involved with the Powell River Project and with Penn Virginia, Slemp does a little farming with his brother. He raises a "few beef cattle, a little burley, and some vegetables. But I don't go to the coal camps to sell the vegetables," he says grinning. "We eat what we grow."

IMPACT

DOLLARS AND SENSE FROM EXTENSION



An unexpected "hayfall" helped many Virginia farmers get by with less rainfall last fall. Nearly 2,400 farmers in sixty-two counties received, between July and October, 143 railroad boxcar and ninety-five tractor trailer loads that contained 97,019 square and 805 round bales of hay.

The hay to help Virginia's drought-stricken farmers came from twelve states through donated rail and trucking transportation. The Virginia Department of Agriculture and Consumer Services coordinated arrangements and transportation while Virginia Extension coordinated distribution at the local level. Extension received assistance from many local Food and Agricultural councils, many individual farmers, and numerous local businesses.

□

The Doomsday Book, mandated by William the Conqueror in 1086, established proper title for all conquered lands for assessing estate taxes. The procedure for collecting tax information on real property has been refined as political conditions and information needs have changed, but many of the types of data collected for the Doomsday book is included

in present-day land information systems.

Catherine M. Long, a research assistant in Virginia Tech's department of agricultural economics, made this discovery when she evaluated the Virginia Land Book and related records for their usefulness in providing rural land information in one of an information series published by the College of Agriculture and Life Sciences.

Long describes the data that is available in each county's and city's land book, including such information as value of land and improvements, taxes levied, parcel ownership, use, and ownership. "The land book, however, is limited by imprecise classification of land use, by inadequate parcel indexing for location, and there is no uniformity," she says.

While the information serves a number of state and local agencies, she says a developed land book could provide the federal government with useful information. Long recommends developing precise and uniform nomenclature and including additional information on transfers of parcels and property characteristics. She provides two models to illustrate potential alternative land information systems.

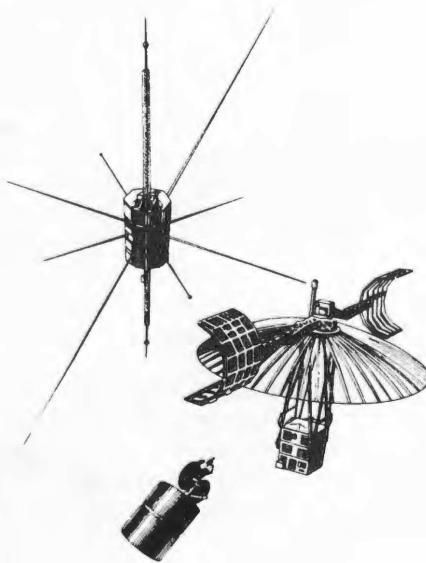
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Four industries and Virginia's Center for Innovative Technology are cooperating with Virginia Tech's department of forest products in the development of an industrially practical process for chemically modifying lignin into raw material for polyurethanes and epoxies. Lignin is an abundant natural material that is separated from wood during chemical conversion to pulp and paper products and related materials.

Three of the member companies have plans for the construction of a new process that changes hardwood into fiber, sugar, and lignin components. The fourth industry is a chemical manufacturer. Researcher Wolfgang Glasser says lignin chemically modified with propylene oxide has been shown in the laboratory to represent a useful raw material for structural materials.

He says the consortium envisions that lignin derivatives will play major roles in new metal-replacing polymers and composites. The two-year, \$120,000 research project strengthens the relationship between the College of Agriculture and Life Sciences and the College of Engineering.

□



Marketing history will be made this fall when the first U.S. satellite livestock sale takes place at Virginia Tech. An undetermined number of feeder cattle will be auctioned via satellite in early fall.

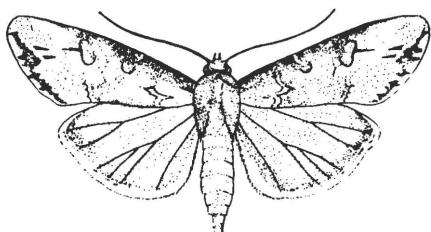
"The satellite sale will be a combination of a live auction and a tel-o-auction," says Bruce B.

Bainbridge, Extension livestock specialist at Virginia Tech. The new technology will offer buyers visual images of feeder cattle direct from the farm, while the sale is being conducted over telephone lines.

"Cattle buyers are like everyone else," says Mark L. Wahlberg, Extension animal scientist at Tech. "They like to see what they are buying."

While the satellite sale promises lots of "gee whiz" value, it also will have definite benefits for both buyers and sellers. "It will allow us to sell farm-fresh cattle that haven't been exposed to diseases or salebarn stress," says Bainbridge. The sale also will provide increased awareness of Virginia feeder cattle throughout the nation—an attractive bonus for the state's beef producers.

□



A better understanding of some insect's visual systems could add to the understanding of human vision and help control insect pests. Entomologists John L. Eaton at Virginia Tech and Lesley J. Goodman at the University of London's Queen Mary College are studying the visual systems of honey bees and cabbage looper moths to determine how the simple and compound eyes of these insects affect their wing movement and flight direction.

The scientists' particular interest is in the ocelli, or "simple eye", that is well suited to rapid detection of small changes in light intensity. The more complex "compound eye" is better able to perceive images.

Previous research indicates the ocelli may aid flight stability in the insects through the detection of pitch and roll. Eaton and Goodman are working to determine the

contribution of each receptor system to the control of flight stability.

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The Virginia 4-H marine education program, a model for the rest of the country, has received a three-year \$140,000 grant to make the outstanding program even better. The program to help youths and adults gain greater appreciation and understanding of marine and freshwater environments is run by Extension at Virginia State University.

The grant will allow the training of more than 300 adult 4-H volunteer leaders in environmental education and will support a variety of activities in each of the six Extension districts across the state. Barry Fox, project coordinator and 4-H Extension specialist at Virginia State, says the grant will enable the 4-H marine camp program to train eight senior 4-H'ers in environmental education so they can act as instructors to the junior youths. The grant also will allow development of a variety of publications concerning environmental education.

□

"Volunteer Group of the Year," that's the title being carried by the Franklin County Extension Homemakers Council. The organization received the honor from the county department of social services.

The Franklin homemakers were cited for two major county-wide projects—providing clothes for children in need and providing the work force to distribute the food in the USDA's commodity food program. Twenty members worked to see that 200 youngsters received

clothing, and sixty homemakers helped on three occasions with the commodity food distribution. Council president Hattie Divers of Rocky Mount represented the 207 members of the ten county clubs at the awards ceremony. Franklin County Extension Homemakers last year contributed more than 10,800 hours of volunteer service in the county.

□



Virginia livestock farmers can cut feed costs by as much as 40 percent by utilizing various wastes. Virginia Tech animal scientist Joseph Fontenot discovered twenty-five years ago that chicken litter can be processed into a nutritious livestock feed. Since then, he has also developed methods for processing safe feed from other kinds of animal, slaughter house, and seafood processing wastes.

Extension specialists in a number of states have used the research results to develop feed programs for producers. Virginia farmers last year found that poultry-litter feeds not only lowered costs but extended the feed supply during droughts.

An estimated 100,000 tons of litter were used to feed cattle in Virginia last year. This saved the state's farmers \$7.5 million when compared to the cost of traditional feed.

□

Baliles Approves Of Tech Study On Agriculture

Virginia Governor Gerald L. Baliles wasted no time before he incorporated some of the recommendations included in the Virginia Tech report on the future of agriculture, forestry, food industries, and rural communities in the Old Dominion. Speaking at the annual Friends of Agriculture banquet in Richmond in mid-March, Virginia's chief executive endorsed and put into action several of the Tech study recommendations that had been submitted to him six weeks earlier.

The first endorsement by the governor was "to support the efforts of Virginia's farmers to make a profit." Farming, he said, has "to rely less on government intervention and more on innovation and marketing—and Virginia state government can help."

He also endorsed further development of the nursery industry so that it could meet all state needs; encouragement of aquaculture research to support the growing public interest in eating farm-produced fish; and helping Virginia producers grow "Virginia Lean" meat, thereby adapting to changing consumer demands.

He also asked the Virginia Department of Agriculture and Consumer Services, Virginia Tech, and Virginia State to produce a plan that shows how agricultural diversification can be established in the state. He set a ninety-day deadline for submission of an interim report.

He agreed with the Virginia Tech report which notes that the state's "agricultural, forestry, and food enterprises are not now given serious consideration for economic and industrial development funds, despite the fact that they provide nearly one-quarter of the economic activity in the commonwealth."

The study, titled *The Future of Agriculture, Forestry, Food Industries, and Rural Communities in Virginia*, is the result of the governor's request of Virginia Tech last summer. Preparation of the study involved hundreds of people within and outside the University, and it includes a series of more than 100 recommendations to strengthen agriculture in Virginia.

The statewide review started in 1985 as a portion of the self study in Virginia Tech's College of Agriculture and Life Sciences. Included in the original study were reports from five regions and materials from each college department and the University's Extension components.

Last summer, Governor Baliles asked that the study be extended to the private and public sectors, which



Many people wonder about the future of agriculture in the commonwealth as urban growth continues.

resulted in a broadly expanded effort. The governor named a policy review board to supply advice and direction and eight public hearings were held across the commonwealth to get citizen input. In addition, forty-four "think tank" committees were formed to examine such topics as marketing, management, and state policy as well as agricultural commodities.

The report to Baliles is in two parts, one which contains twenty-seven recommendations and is done with a broad brush and a second supplementary study which gives greater detail and testimony to support the nearly eighty recommendations within its pages.

The study notes that farming, fishing, and forestry accounted for 22 percent of Virginia's revenue and contributed \$19.1 billion to the state's economy during 1984. These industries also employed 22 percent of the state's labor force. It observes that the consumer price index increased by 151 percent from 1975 to 1984, but Virginia's gross agricultural receipts rose only 87 percent during the period.

The report also notes that 40 percent of the value of the state's agricultural production in 1984 came from commodities that are declining in marketability.

To ensure that agricultural, forestal, and food-related enterprises remain vital contributors to the state's economy, the more than 100 recommendations contained in the report range from the restructuring of state government to selling Virginia-grown products at interstate rest stops.

To anticipate the challenges and opportunities facing agriculture, forestry, and food industries, the report recommends that a Strategic Planning and Analysis Institute be established to identify business opportunities. The Institute would gather information needed to predict the effects of population, consumer trends, and government policies on these enterprises.

The study says an essential first step is strategic planning and leadership by the state. Better coordination among state agencies would result in clearly assigned responsibilities, program coordination, innovative problem solving, the elimination of unnecessary duplication, and greater efficiency.

The study recommends expansion of the Rural Virginia Development Foundation and the establishment of a National Rural Development Center at Virginia Tech to conduct research crucial to the future of rural communities. The national center is needed to fuse the ideas and initiatives that have developed in Virginia in recent decades.



Governor Gerald Baliles believes agriculture has to rely on innovation and marketing to survive.

The study observes that Virginia has one of the highest urbanization rates in the nation. Not only are streets, housing developments, shopping centers, and parking lots devouring thousands of acres of fertile land, but the large urban centers are drawing some of the state's brightest young people and most energetic enterprises away from rural communities.

To help meet this challenge, the report recommends attracting new food production and processing enterprises and fostering the development of those already in existence. The commonwealth needs to assure that these industries have access to financial, technical, and additional forms of assistance that are equal to that granted other types of enterprises.

There also is a need to protect the renewable resource base on which agriculture, forestry, and food industries depend. Pressures on the state's land and water resources will continue to intensify, making it necessary that growth be managed so that the positive benefits will outweigh the negative ones.

It also was recommended that an Agricultural Biotechnology Institute be created as a part of Virginia's Center for Innovative Technology. Establishing a new division rather than making the Institute part of an existing operation has the advantage of being able to locate it where the expertise



and groundwork in agricultural biotechnology already are available.

Other recommendations include:

- Establish trade agreements with foreign countries to facilitate marketing of Virginia's high-value agricultural products and develop new products for targeted foreign markets.
- Include the agricultural business sector in legislative reforms related to insurance liability.
- Establish a "GI Bill" style program to train displaced and part-time farmers for nonfarm employment.
- Convert the land near the Chesapeake Bay to non-intensive agricultural uses so that pollution of this national treasure will be reduced.
- Get variances from mined-land-restoration regulations for agricultural, forestal, mining, and industrial enterprises in Southwest Virginia so there could be more economic activity. This could be done without compromising the environmental integrity of the region.
- Encourage the growth of rural inns for tourists.
- Encourage the expansion of an aquaculture industry that is based on small businesses and on-farm production.

Other recommendations involve development of alternative crops, improving foreign language education, setting up agricultural fellowships and scholarships, and seeking new national and international markets.



State officials noted that implementation of some of the recommendations began when the report was received. ■



On the Road To Leadership

By Sherrie Whaley

"Our voices need to be heard," says Martha Myer of Clarke County, a veterinary clinic general manager and school board member. "The urban influence is growing in Virginia, while the rural voice is shrinking."

The face of rural Virginia has been altered greatly in recent years. Farm numbers have declined and agriculture's place in the policy-making process has changed. These changes have created a growing need for more leadership to emerge from rural communities.

Extension is meeting this challenge by providing leadership training to rural Virginians such as Martha Myer. The Boyce resident is one of seventeen men and women participating in a two-year Virginia Rural Leadership Development Program (VRLDP).

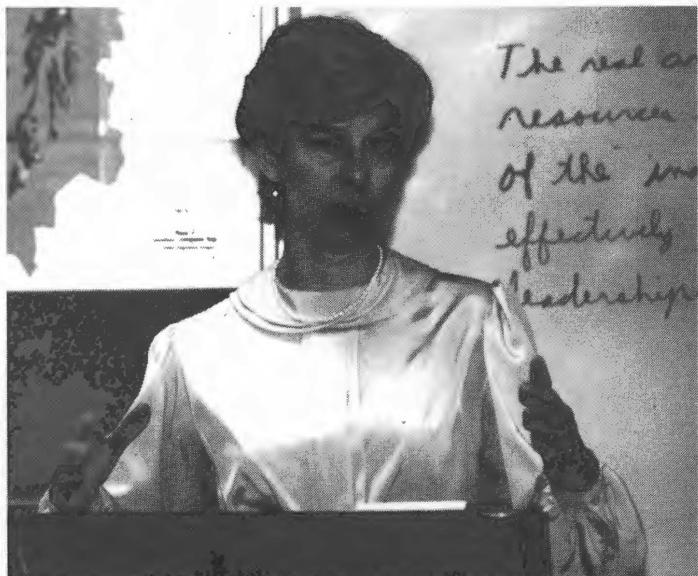
The first VRLDP class, which began in late 1985, includes fifteen multi-day training sessions. Participants have traveled extensively throughout Virginia and have visited Washington, D.C., and the states of Wisconsin, Michigan, Illinois, and Indiana. An international tour is currently being discussed.

"Our purpose is to help class members develop their abilities to excel when performing in leadership roles," says J. Paxton Marshall, Extension economist and public policy specialist at Virginia Tech. Instruction includes formal lectures by recognized leaders, debates, tours, seminars, and conferences.

"The traditional economic base is being seriously undermined in the rural areas of Virginia," says thirty-three-year-old David Hauslohner, a VRLDP class member from Grayson County. A part-time farmer and relief mail carrier, Hauslohner believes the program will help him become a more effective community leader. "It's altered my perceptions considerably," he says. "I would highly recommend it to others who are interested in the future of their rural communities."



Paul Saunier Jr., secretary of the Ivy Creek Foundation, talks with VRLDP participants on how to develop natural areas.



Julia C. Bagwell of South Boston makes a point during one of the Charlottesville workshops.

Training future leaders can be a formidable task, according to Jim V. Williams, VRLDP director and Extension community resource development specialist at Tech. "Leadership development is a lot like love," he says. "It's an abstract thing that's difficult to put your finger on. All we can do is provide the skills that we think are necessary to develop as a leader."

Among those skills are public speaking, problem solving, group dynamics, listening to others, communicating effectively, learning how to motivate others, and developing an understanding of how communities function.

"It's becoming more important for people at the grass roots level to understand the workings of their community and how their community fits into the state and federal picture," says Denise Bland, VRLDP class member and Northampton County resident.

A practicing attorney in Cape Charles, Bland feels the program has been very beneficial. "There's a lot that we take for granted in our communities," she said. "It's been an eye-opening experience for me."

The VRLDP is a joint endeavor of Virginia Tech and Virginia State. Initial financial support was provided by the W.K. Kellogg Foundation, an organization which has offered funding for rural leadership development programs in at least fifteen states.

Studies of the programs have shown that class participants increased their leadership capabilities and earned more responsible leadership roles as a result of completing the program. A second Virginia class is scheduled to begin in November. **W**

IN BRIEF

NEWS OF INTEREST FROM ACROSS VIRGINIA



The Virginia 4-H Foundation has established a board of directors to help it seek resources to begin new programs as well as continue to offer scholarships and maintain the current offerings. The charter members are *Jean Bass, Richmond*, director of minority businesses in the Department of Minority Business Enterprises; *David L. Conner, Richmond*, senior agricultural coordinator with Philip Morris U.S.A.; *James T. Earwood, Richmond*, vice president, division services at Virginia Power; *A.L. Eller, Blacksburg*, Virginia Tech Extension animal scientist.

Also, *Cynthia Kinser, Pennington Gap attorney*; *Rhoda Maddox, Winchester*, Frederick County board of supervisors member; *Willette Merritt, Danville*, retired Extension agent; *John Miller, Harrisonburg*, secretary-treasurer of the Dairy Foundation of Virginia, Inc.; *Herbert Pettway, Virginia Beach* Extension agent.

Also, *Gracey Porter, Windsor*, Isle of Wight school board secretary; *Tatum Saunders, Piney River*, a 4-H volunteer leader; *Mary Shulz, Ashburn*, 4-H'er who is a freshman at Virginia Tech; *William Skelton, Blacksburg*, dean emeritus of Tech's Extension Division; and *Nancy B. Slaughter, Richmond*, director, Southern States Cooperative, Inc.

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A new program of horse nutrition research is being added to the pasture and cattle forage systems investigations at the Middleburg Agricultural Experiment Station. Work in all three areas is being supported by a two-million-dollar grant to Virginia Tech from *Paul M. Mellon of Upperville*.

The funds will provide an endowed chair for a world-class distinguished professor at the Blacksburg campus who will give leadership to the Middleburg program. In addition to the one-million-dollar endowed chair, \$500,000 will be used to construct a new research laboratory and seminar facility at Middleburg, and provide up to one-half the cost of constructing horse research barns and exercise facilities.

The balance will provide \$150,000 to start the horse nutrition research program, \$100,000 toward forage and cattle research, \$175,000 to endow a program of student-initiated research projects, and \$75,000 to endow a visiting scholar and seminar program.

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This year, *Pauline R. Matthews* has been wearing two hats. The Accomack County Extension agent also is Norfolk State University's Miss Alumni. She began her year's reign last fall at the school's homecoming activities.

A native of Accomack County, the acting unit director graduated in 1979 from Norfolk State with a bachelor's degree in home economics. She also holds a master's degree in home economics education from Ohio State University.

Each year, "the Norfolk State Alumni Association lets an active chapter select a Miss Alumni. It



was the Eastern Shore chapter's turn this year," Matthews says. "There was no competition." Competition or not, she calls the honor a "challenge" and hopes to perform the required duties in an exemplary manner.

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Virginia's distressed farmers will receive assistance as the result of a \$50,000 grant to Extension from the U.S. Department of Agriculture. The funds are being used to prepare Extension agents to work one-on-one with farm families, says *Gerald W. Warmann*, Virginia Tech farm management specialist. It is the second such grant in three years.

Warmann says that 400 Virginia farm families received intensive management help from Extension in each of the last two years. The new grant is being used to develop training and tools to aid agents in showing how to tie production and marketing planning to financial analysis.

□

DID YOU KNOW?

In 1914, when the passage of the Smith-Lever Act officially established the Cooperative Extension Service across the nation, a network of Extension agents already existed in Virginia. That year, when demonstration work was transferred from Burkeville to Virginia Tech, there was one state agent, four district agents, fifty county agents, and five special agents, located in fifty-two counties.



Not only does Dinwiddie County have the distinction of being the location of the first 4-H community club in Virginia, but in 1923 it became the county having the first home demonstration club in the nation. The present name of the national organization, Extension Homemakers, was adopted in 1972.



When the Cooperative Extension Service became a reality in Virginia in 1914, it was established at the land-grant institutions. Extension has been a part of the history of Virginia Tech since that time. The same cannot be said for the state's other land-grant university. When established, Extension was at Hampton Institute. In 1920, however, the land-grant designation was transferred from the private school to Virginia State University and has remained with that institution ever since.



During the great flu epidemic of 1918, Extension's home economics agents volunteered and served under the state health commissioner, establishing diet kitchens and organizing hospitals in high school buildings when they were needed.



VIRGINIA EXTENSION
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