VIRGINIA EXTENSION

THE VIRGINIA COOPERATIVE EXTENSION SERVICE MAGAZINE

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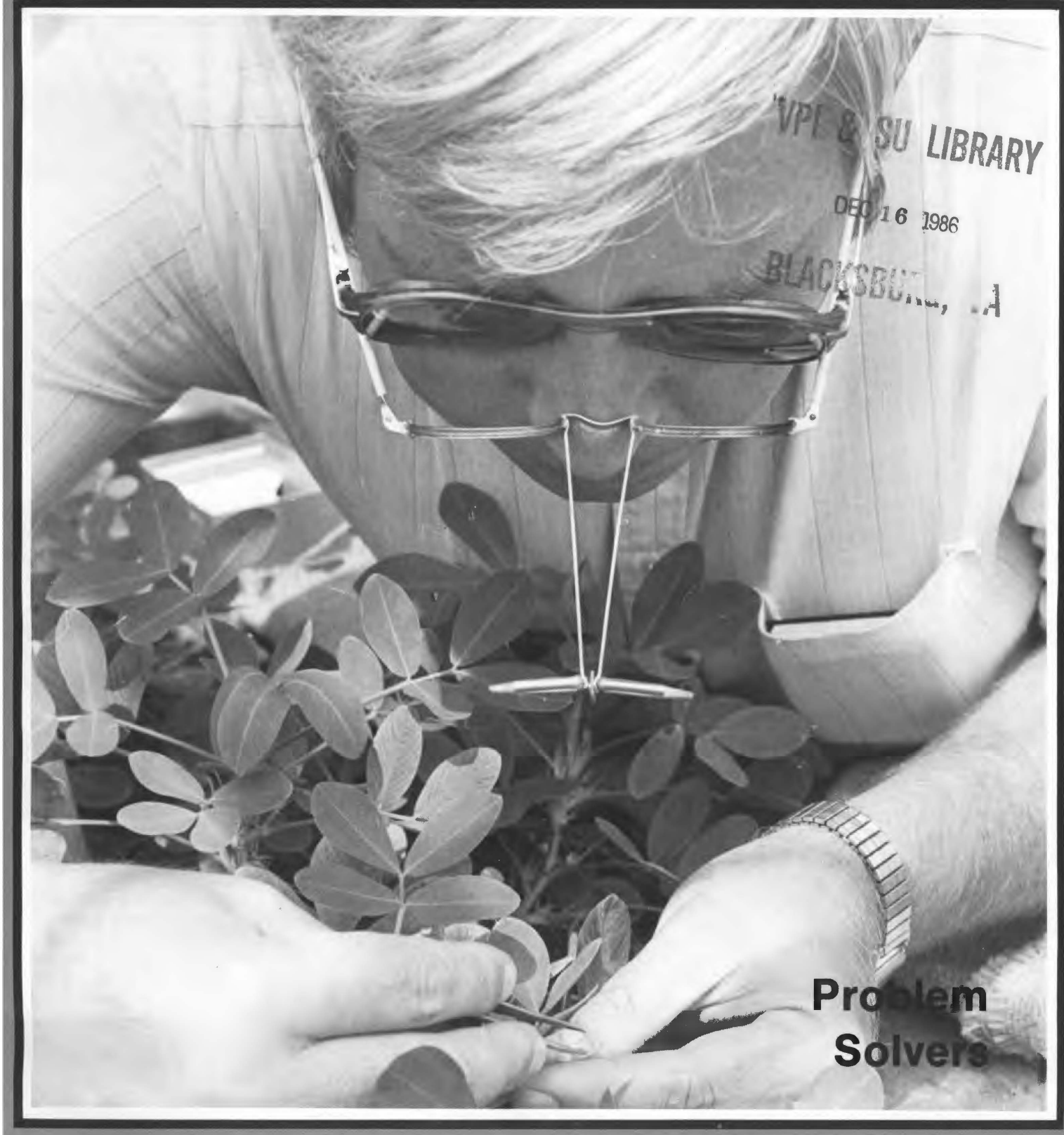

Problem Solvers

Virginia Tech Virginia State Virginia's Land-Grant Universities

COMMENTARY

M. R. Geasler
Vice-Provost
Extension Division

Tight $$$ Taking Its Toll

Extension, both in Virginia and across the nation, has gained a reputation for being able to respond quickly and efficiently during critical times. During the past two years, this ability has been sorely tested as Extension has been asked not to solve a critical situation within society, but to continue its high-level of service to Virginians under budget restraints.

Several factors have contributed to these continuing budget constraints. You are aware of federal budget cuts that we are currently living with. This factor, combined with no increase in state funding over the last several years, has put our system in a critical situation.

The most pressing issue the budget creates relates to staffing and filling vacancies. Over the last nine months, we have operated under a freeze on hiring new employees. During this time, we have accumulated a list of vacancies. We do not now have, or foresee having in the near future, the available funds to begin filling these positions with new applicants.

This list of positions has been reviewed by the administrative team of the Virginia Cooperative Extension Service with each position being ranked in priority order as to its importance to an area. Factors in ranking these critical vacancies included absence of program leadership in the unit, such as no agricultural agent, and the current composition of the staff as it related to a core staff.

Core staffing guidelines were developed and implemented statewide in the fall of 1984. The purpose was and is to facilitate a similarity in workloads among agents from unit to unit and to insure program leadership in all areas. This was based on demographics within the unit.

We see the core staff as being the number of people in designated program areas necessary to meet the Extension educational needs of the clientele in a particular Extension unit. Most units have operated with a core staff for the last two years. Some have operated below and some have been above the core number of staff. Some vacancies have put a staff below core, immediately raising them to near the top of the priority list.

After exploring all options, we found that the transfer of agents is the only viable alternative in filling some of the critical positions. This is not something we have done in Virginia Extension before and is not painless, but it is our best answer for our current dilemma.

A description of the process we are now undertaking to fill critical positions can be likened to the row of dominoes. The first domino was a list of available positions determined to be critical to the success of a local program. Application to these positions was open to any Extension agent in the state.

Those agents currently in "above core" positions were encouraged but not required to apply for the positions of their choice. That domino has fallen and some of the critical positions have been filled. So far, these moves have been viewed as positive both for the individual and the organization.

This created the second domino which is a list combining some of the original critical positions and those vacancies deemed as critical created by the transfers. This domino soon will fall, exposing a third that we anticipate will fall by the end of this calendar year. Each time a domino falls, the list is re-evaluated to determine the critical nature of the vacant positions.

Should positions of a critical nature still be vacant after the three dominoes fall, agents still in "above core" positions will then, and only then, be asked to move so that we can achieve program leadership in all four program areas within the unit.

We cannot justify two agents giving leadership to one program area in a given unit and having no leadership in the same program area in another unit. We understand it is hard for localities to accept the loss of an agent. But when considering the total organization, agent leadership in all program areas in all units is vital to our success.

We all are continually making adjustments to our changing world. Our responses in this time of change in Extension may seem rough in the short term, but we believe these transfers are in the long-term best interests of our organization. We ask your support and welcome your questions.

VIRGINIA EXTENSION

The Virginia Cooperative Extension Service Magazine

VIRGINIA EXTENSION

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FRONT COVER

Terry Coffelt concentrates on pollinating peanuts at Tidewater Agricultural Experiment Station at Holland (Photo by Bob Veltri).

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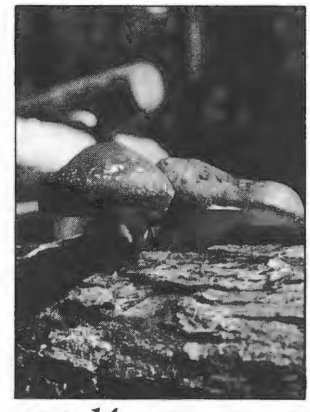

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INNOVATIONS

RESEARCH TO BENEFIT VIRGINIANS

A new technique to save elm trees is being tested in Roanoke by R. Jay Stipes, Extension plant pathologist at Virginia Tech.

"Dutch elm disease has been catastrophic to the elm population," Stipes says. "Once a tree gets the disease, it is doomed." A vascular disease, the Dutch elm fungus enters the water-conducting tubes in the tree, clogging them. The tree literally dies from lack of water.

Dutch elm disease has been prevented in high-risk areas through the injection of the fungicide deep into the trees before they have shown signs of contracting the malady. This traditional practice, however, dilutes the fungicide and causes artificial wounds through which bacteria can enter the tree.

"The new injection method consists of injecting the outer sap wood only," Stipes explains. "By injecting the outer growth ring, the fungicide is concentrated in the area where the disease gets its start." The technique, developed at Harvard and Tufts universities, provides Dutch elm protection for three years.

Stipes will study the Roanoke trees for a few years, performing periodic biopsies to monitor fungicide movement. He will also test such resistant varieties as the liberty elm to determine how they do under Virginia conditions.

□

Virginia Tech's research and Extension efforts now stretch to Timbuktu. Tech, as a part of a team with Auburn and Texas A&M universities, has signed a five-year agreement with the government of Mali to provide farming systems research and Extension training to the West African nation.

A major component of the program is training for twenty-two graduate students at American universities so they can continue research and Extension efforts when they return home.

Thomas Fretz, head of the department of horticulture at Tech, will coordinate the training of the twenty-two Mali graduate students in the United States. He will also design farming system workshops and seminars and see that experts will be sent to Mali as needed under the contract.

Tech's involvement is a result of its experience in developing farming system programs and other work in Africa. Extension recently completed a five-year, five-million-dollar project to instruct the governments of six Sahelian nations in financial management so that they can better administer future foreign aid. The project, funded by the U.S. Agency for International Development, is being done through the Southeastern Consortium for International Development.

□

Water-soaking pavement can help save the bay. Without runoff, fertilizers, sediment, urban debris, and other pollutants remain on site rather than being transported to waterways and the Chesapeake Bay. Installing porous pavement limits the water runoff that requires costly storm sewer systems, extended detention ponds, and culverts.

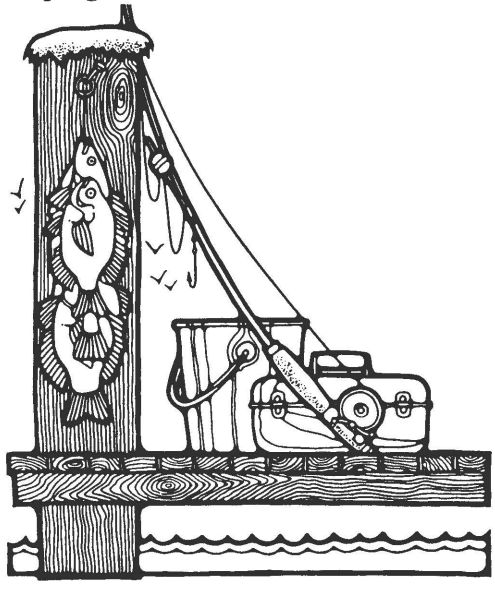
In August, Extension demonstrated the innovative concept at Davis Ford Park in Manassas. An initial test of the pavement determined that 2,000 gallons of water was absorbed in a ten-foot square area in less than 20 minutes.

A rainfall simulator, developed in Virginia Tech's department of agricultural engineering, doused the pavement with up to 200,000 gallons of water to demonstrate the infiltration characteristics of the pavement to the more than one hundred persons attending the demonstration. The program was in conjunction with a series of similar demonstrations held around the state to show how various management practices can help reduce pollution of the Chesapeake Bay.

□

The "three-T's" will expand markets for Virginia seafood. Seafood tours, tastes, and teaching attracted product wholesalers and retailers from across the East and Midwest in order to illustrate the diversity, quality, and opportunities offered by Virginia seafood. For three years, a number of Virginia seafood firms and state

agencies, working in cooperation with Virginia Tech's College of Agriculture and Life Sciences and sponsored by the Mid-Atlantic Fisheries Development Foundation, Inc., have conducted the programs.



The participants spend two days touring four seafood processing plants and modern retail market, going to sea in the Virginia Marine Resources flagship, eating seafood and participating in a seafood marketing education program.

"The more retailers understand our business and the more we understand about theirs, the smoother the relationship," says Charles Coale, Virginia Tech Extension agricultural economist.

Coale says the idea and implementation for the program came from the industry. Tech faculty in food science and agricultural economics pulled together the support and knowledge of Virginia's seafood industry, university faculty in the seafood marketing program at the Seafood Experiment Station at Hampton, Virginia Extension, the Virginia Marine Resources Commission, Virginia Marine Products Board, and Virginia Sea Grant education resources to create the program with the Mid-Atlantic Fisheries Development Foundation funds.

□

Virginia ham that is shaped like the Commonwealth may become a popular item in many stores. This may be the shape of things to come as technology allows the reshaping of less-used cuts of meat into more desirable and marketable products.

Today's consumers, demanding more convenient and less fatty meats, are using fewer roasts, whole hams and other large cuts of meat that take hours to prepare, says Norman Marriott, Extension food scientist at Virginia Tech.

To meet the consumer's changing tastes, food processors are restructuring meat. The bone and fat are removed and the particle size is reduced and formed into chops, steaks, or some other shape that fits the market demand.

"It is somewhere between ground beef and a whole-muscle cut," Marriott says. "It has more texture than ground beef and is more tender than a whole-muscle cut." The new forms of meat products can be better protected, and their flavor enhanced and preserved for longer periods of time.

The restructured meats aren't restricted to beef. There are turkey hams, chicken and pork nuggets, and many other restructured products on the market. The steak of tomorrow may taste the same and be more tender, yet will come from cuts of meat that yesterday would have been used for stew.

□

Senior citizens of rural Appalachia are benefiting from a postdoctoral fellowship awarded to Janette K. Newhouse, Virginia Tech Extension specialist in family and child development. The fellowship awarded by the Gerontological Society of America, will allow Newhouse to determine how to provide activities that are geared to the rural Appalachian senior community. She is conducting a study at the Region I Area Agency on Aging at Princeton, West Virginia.

Fifteen multi-purpose senior centers are involved in the study. The larger project is funded by the Administration on Aging in the U.S. Department of Health and Human Services.

□

Harvest roadside timber for "viewcreation" in Mathews County is one suggestion from landscape architecture students at Virginia Tech. For three years, fourth-year students studied

Mathews County to recommend better land use. Paul A. Hellmund, Tech assistant professor of landscape architecture, has directed the program. They recognized the aesthetic functions of agriculture and recommended judicial harvesting of view-blocking tree buffers along roads to eliminate the closed-in feeling for drivers.

The students found that the residents' desire to keep the county rural is sound since only a small part of the Eastern Virginia county is suitable for development. They recommend that any growth should be carefully planned.

They think farmers should increase their usage of "best management practices" to maintain the "integrity of farming while lessening the negative influences that farming has on the Chesapeake Bay."

The students conclude their report by saying "Mathews County has a world-famous natural resource—the Chesapeake Bay. Equally important is another resource—the county's people, whether 'been here' (those who have been in the county for generations), 'come-here' (those whose families have come more recently, or 'here-now' (vacation visitors) all can play a part in making Mathews and the Chesapeake Bay the best they can be."

□

Experiment Station Celebrates Century of Service

By Susan Trulove

In March 1886, the new Virginia Agricultural Experiment Station faced an imposing task with modest resources.

The station comprised a greenhouse, garden, and laboratory on the Virginia Tech campus. A century later it would boast a network of twelve additional branches across the state, all drawing on the resources of the fifteen departments in Tech's College of Agriculture and Life Sciences, as well as the Virginia-Maryland Regional College of Veterinary Medicine and the College of Human Resources.

The original station director William B. Preston, botanist and entomologist William B. Alwood, and two other researchers couldn't have foreseen the future as they sold garden produce to get enough revenue to build a new greenhouse and hotbeds.

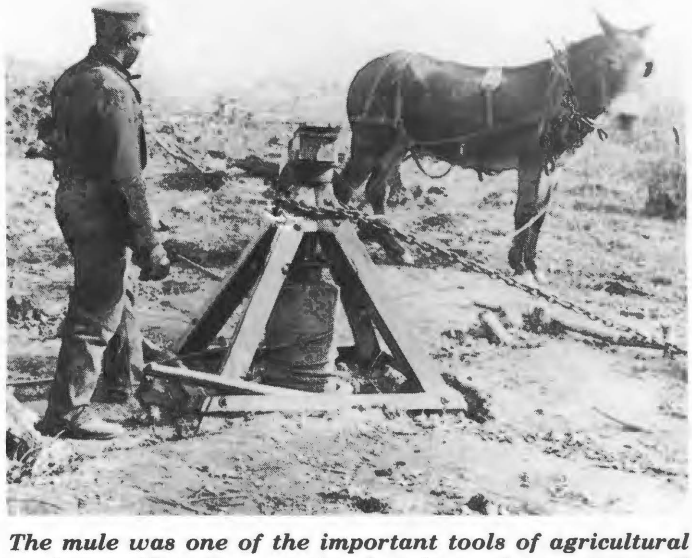
As austere as the beginnings were, wheat variety research started. Within two years, variety tests were under way on tomatoes, potatoes, strawberries, cabbages, and onions and feeding trials were being conducted on pigs and steers.

An international reputation for experimentation soon followed as an impressive orchard and fruit farm was established with 236 varieties of 13 different fruits. The bulletins on the orchard work were in demand around the world, winning the Silver Medal and Diploma of the French National Society of Agriculture.

In 1904, cutting-edge work by a new department of field experiments began agronomic studies which were to have a profound influence on farm management, producing a system of crop rotations that suited the particular soil, climate, and topographic conditions in different sections of the state. It also signaled the beginning of research on cooperating farms across the state. Soon a string of substations began to be added to accommodate the work for a state that today boasts more commercial farm commodities than any state but California.

Virginia Tech Archives

Polly and Blue powered the above cultipacker, directed by Frank Morris, until 1946 when the horses were replaced by a tractor. The tractor was replaced in 1984.



The mule was one of the important tools of agricultural engineers. The above worker is using mule power to pull stumps.

The first substation was established in 1906 at Chatham. Over the years, twenty-four such stations were established. The Chatham operation, as well as those at Appomattox, Axton, Bowling Green, Saxe, Staunton, Louisa, Martinsville, Charlotte Court House, Salem, and Lightfoot, eventually closed as the problems leading to their establishment were solved or two or more operations were merged at one location.

• ***Eastern Virginia Agricultural Experiment Station*** — 1912. Originally established in Williamsburg, it moved to Warsaw in 1950. Its research focus is on breeding, variety testing, and cultural practices for corn, small grains, and soybeans. Insect control by chemical and biological methods gained importance when an integrated pest management unit was added in 1979.

Research at the station led to the development of seven soybean, eight barley, six wheat, and five oat varieties that are important to Virginia producers. Eighty percent of the beans planted in Virginia were developed at the Warsaw station. The station also has been the site of extensive research in controlling insect pests in corn, soybeans, and small grain.

• ***Tidewater Agricultural Experiment Station*** — 1914. Established in Holland, this station has responded to area producer needs in peanut and swine production as well as in soybeans. Tillage and irrigation also have been the objects of research in recent years.

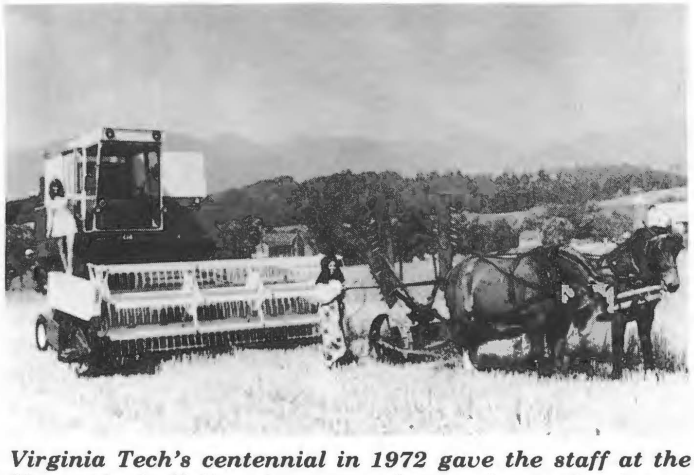
The work at the station resulted in control of peanut leafspot disease in the 1930s; the indirect fertilization of peanuts in the 1950s; a predictive nematode assay program in the late 1970s; and today's weather-monitoring program that tells when to apply fungicides so that less will be used. Research in recent years has given producers an additional $4.9 million in income because of a weather-based formula for harvesting peanuts and another $1.5 million annually by changing plant spacing from 2.5 to five inches.

• ***Winchester Agricultural Experiment Station*** — 1921. It was established as the Winchester Fruit Laboratory to develop more fruit production information.

Recent contributions have included the reduction of damage from pine and meadow voles to fruit trees from $7 million to $1 million, while cutting control costs from $30 to $10 an acre; formulating predictive programs of environmental factors that influence a variety of diseases; and reducing the loss of newly planted peach and apple trees by studying planting depth.

• ***Northern Piedmont Agricultural Experiment Station*** — 1940. This station at Orange is devoted primarily to soil fertility research and variety hybrid testing programs. Most fertilizer, lime and variety corn hybrid recommendations for the northern Piedmont area of the state are based upon work carried out there.

Examples of outstanding research at the Orange station include tripling wheat and corn yields for area farmers in the 1940s; adding to the basic understanding of chemical and physical reactions in soils; finding that a few ounces of molybdenum added to the soil can replace five or six tons of lime in high acidic soils; and introducing four inbred lines and one germplasm population of corn in the last year.



Virginia Tech's centennial in 1972 gave the staff at the Shenandoah Valley Agricultural Experiment Station at Steele's Tavern an opportunity to show old and new equipment. The station is also the site of the Cyrus McCormick farm, a historical landmark that includes a display about the McCormick reaper and other information concerning the inventor. The homeplace was donated to the Virginia Agricultural Experiment Station by the McCormick heirs so that it could continue to make contributions to agriculture.

The Orange facility also acts as a testing ground for such new crops as sun flowers, sweet sorghum for alcohol production, perennial rye grass, popcorn, and rape. Rape seed produces oil for cooking and because of unique features of some high-acid varieties, is even used as an acid to cure metals.

• ***Middleburg Agricultural Experiment Station*** —1949. It was established as the Virginia Forage Research Station through the efforts of area landowners and a gift of a 420-acre farm and $125,000 from Paul Mellon. The station is devoted primarily to finding ways to improve management of pastures and supplements in feeding cattle.

An important research contribution has been the development of the twelve-month forage plan for beef cattle production which integrates pastures, hay, and corn silage. Other research has determined the advantage of legume-grass combinations for pastures; when best to harvest corn for silage and legumes and grasses for hay; the advantages of creep fencing for calves; and establishing red clover in fescue and orchard grass using no-till methods.

• ***Southwest Virginia Agricultural Experiment Station*** — 1951. Located near Glade Spring, it is the home of burley tobacco and beef cattle management research. In recent years, it has become a research center on sheep production.

It has been found that by spacing tobacco plants at a twenty-four-inch interval, rather than the standard eighteen inches, there will be a lower yield per acre but a higher yield of better quality tobacco per plant.

Researchers at Glade Spring also have developed new varieties of burley,including Va. 509, the highest yielding variety that is resistant to black-shank disease. Animal scientists at the station improved a management system that enables producers to get one additional lamb crop every two years. This

Gravity flow and mule power is how chemicals were loaded and sprayed in eastern Virginia in 1919 when the Virginia Truck and Ornamentals Research Station held demonstrations concerning spraying potatoes at Virginia Beach and on the Eastern Shore.

increases lamb numbers by 25 percent and means more than $2 million annually to producers.

• ***Shenandoah Valley Agricultural Experiment Station*** — 1954. More than 155 years ago, Walnut Grove farm near Steeles Tavern was the site of a revolutionary discovery in agriculture when Cyrus McCormick built the first mechanical reaper. In 1954, McCormick's heirs deeded the 624-acre farm to Virginia Tech to be used as an experiment station. A small area of the farm is designated a National Historic Landmark, with a reproduction of the original reaper, period photographs, and other early-farming artifacts in the original outbuildings. But the remaining land and buildings are involved in the station's efforts to find answers for the future. The station is involved in research in animal science, agronomy, horticulture, entomology, agricultural engineering and forestry.

A major research effort at the Shenandoah Valley station has been on the use of poultry litter as feed for beef cattle and sheep, which has saved state livestock producers millions of dollars in lower feed cost. Cattlemen also have benefited from the station's more than thirty years of research on the genetics and breeding of cattle for improved fertility and growth.

The station also is the site of one of the nation's oldest ram-testing centers. Researchers are heavily involved in finding ways to improve weight gain in feeder lambs through breeding and nutrition. Predator control, from new fencing methods to the use of donkeys as flock protectors, is being studied at the station.

• ***Reynolds Homestead Agricultural Experiment Station*** — 1969. The station was established near Critz on 700 acres of land that was donated by Mrs. Nancy S. Reynolds, daughter of tobacco magnate R.J. Reynolds. Studies here include research on forest watersheds and soils establishment and maintenance of woodlots. Research has demonstrated

It took two people to spray an orchard to reach the high and low spots, and someone else to drive in the early days at the Winchester Experiment Station. Equipment became more self-contained with time, until now a driver can control spraying from several levels and tanks. The latest equipment also allows a tank to be completely emptied, where until recently, there were always a few inches of chemical left that had to be removed before the tank could be cleaned.

This sulky or two-way plow, used at the Northern Piedmont Agricultural Experiment station in Orange in the 1940s, is now in the James Madison Agricultural Museum in Orange County.

the value of loblolly-pitch pine hybrids, which combine loblolly pines' fast growth with the cold-hardiness of pitch pine.

Recent research contributions have included a standardized testing procedure to determine the quality of loblolly pine seedlings; a finding that less intensive preparation procedures in some forested sites reduce erosion and allow acceptable growth rates; methods to reduce soil compaction when harvesting trees; and cultural methods to germinate and raise seedlings of the endangered round-leaf birch.

A new breeding orchard for the endangered round-leaf birch will allow researchers to gain a better understanding of the species' genetics and to provide a backup population to those found in the natural range.

• ***Southern Piedmont Agricultural Experiment Station*** — 1974. After an extensive site search, the station opened near Blackstone on an 1,100-acre tract that had been out of agricultural production for nearly

These three hogs give ample evidence to the great strides that have been made in animal nutrition through research at experiment stations and land-grant universities. The animals came from the same litter but the middle porker was fed a 1910 diet while the one on the right got the 1950 treatment and the one on the left received the diet that is given to today's animals.

thirty years. Research by station scientists has added more than $20 million annually to farmer incomes through tobacco research on pest and disease control, developing new tobacco varieties, and extensive work on vegetables and small fruits.

Control of the predictive nematode assay started here offered a potential savings of $11.7 million last year. Work to control the tobacco flea beetle and the green peach aphid saves growers nearly $1 million a year. Other genetic or plant breeding developments have resulted in several varieties that are resistant to disease.

Five new varieties have been approved for release to tobacco producers. One flue-cured variety and two each of sun-cured and burley have been developed with inbred disease resistance. Research with small fruits, particularly blackberries, blueberries, raspberries, and table grapes, could result in new supplemental cash crops.

• ***Virginia Seafood Experiment Station*** — 1975. It opened in a former seafood processing plant on the Hampton waterfront. The station works directly with the commonwealth's $200 million seafood industry, to respond to emergencies and help expand existing markets and open new ones.

Having an experiment station on the shore has the added advantage of doing projects that require careful scrutiny or close contact with the industry for weeks at a time. Joint ventures with equipment manufacturers are also possible because the station is near the plants where researchers can evaluate the equipment in operation.

Researchers at Hampton developed a process for the bulk pasteurization of crab meat, greatly extending the product's shelf life. They also developed pasteurizing processes for oysters, seafood soups, and seafood mixes that can extend the shelf life of these products from less than two weeks to, in some cases, more than a year.

When Kepone contamination in the James River threatened the oyster seed beds there, the staff at Hampton went into almost around-the-clock work to find that if the oysters were moved from the James River and were allowed to spend the summer in warm waters, they would eliminate the Kepone from their systems.

• ***Hampton Roads and Eastern Shore Agricultural Experiment Stations*** — 1985. In 1907, Norfolk vegetable growers opened the Virginia Truck and Ornamentals Research Station (VTORS) in what is now Virginia Beach as an independent agency. Work consisted of studies concerning vegetable production. When vegetable production declined in Hampton Roads in the 1960s, research emphasis changed to nursery crop production.

In 1913, the VTORS board established a substation on leased land on the Eastern Shore to serve the growers there. A permanent site was located near Painter in 1956. Its main research originally was in commercial vegetables but now includes soybeans, small grains, herbs, and fruit.

In July 1985, VTORS became a part of the Virginia Agricultural Experiment Station. Earlier this year, Tech's Board of Visitors put "agricultural experiment" in the names of all the stations for easy identification.

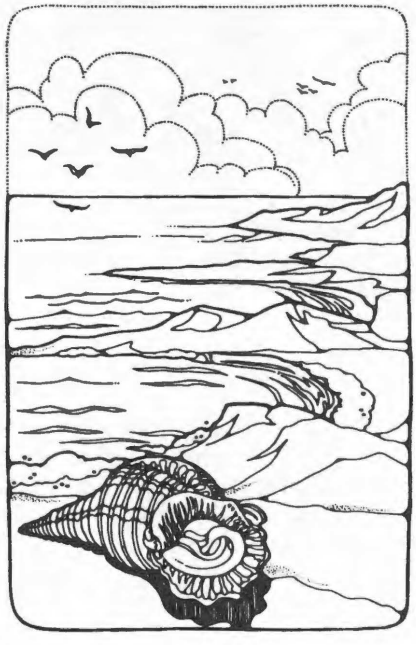
Members of the Virginia Truck and Ornamentals Research staff pose for a picture in 1909. They were, from left, Joseph Milstead, USDA researcher; C.S. Heller, assistant horticulturist; Monnie Leatherbury, secretary; T.C. Johnson, director, and Alfred Orcutt, USDA researcher.

James R. Nichols, dean and experiment station director, observes that the accomplishments of the experiment stations are impressive. "But we cannot rest upon our laurels," he says. "We must attack and solve those production and economic problems facing today's farmers so that they can continue to supply the food and fiber needs of the United States and the world. And we must make the changes necessary to strengthen the future of the agricultural industry, with even greater attention to processing and marketing."

The above ceremony signified the first acquisition of land by the Tidewater Agricultural Experiment Station at Holland after two decades of having to rent acreage for experiments. Parke C. Brinkley, left, executive secretary of the Association of Virginia Peanut and Hog Growers who later became state commissioner of agriculture, watches as station superintendent E.T. Batten presents a check to Paul Everett, attorney for the seller. On the right is Del. William E. Cohoon, who represented Nansemond County and the City of Suffolk.

IMPACT

DOLLARS AND SENSE FROM EXTENSION



Two-third's of Virginia land sheds water into the Chesapeake Bay.

Virginia Tech scientists in the College of Agriculture and Life Sciences have mapped more than 3.8 million acres of the state to determine which areas pose the greatest danger of polluting the bay. Once the area is identified, soil conservation officals can work with farmers to reduce non-point source pollution from agricultural lands.

Vernon O. Shanholtz, the agricultural engineer coordinating the program, says the extensive computer data base takes into consideration such factors as the land's elevation, soil type, use (cultivated, forest, or pasture), and if it contains any bodies of water.

"This data base will show us where we need to concentrate our efforts," says Shanholtz. Using the computer data, conservation officials can also do simulations of several land-use plans to determine which provides the best results. For example, conversion from conventional to no-till cultivation might be the answer in some areas, while a buffer strip between cultivated land and waterways may be the right practice in others.

The Environmental Protection Agency has identified bay-wide problems, such as nutrient enrichment, concentrations of toxic substances in sediments and water, oxygen depletion, and declines in aquatic vegetation and other living resources. Runoff from agricultural lands is believed to play a role in creating some of these problems.

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The Blue Ridge Area Food Bank in Augusta County is a broker between producers, suppliers, and distributors of food to the hungry. Since operations began in 1981, it has distributed eight million pounds of food worth more than twelve million dollars. Three million pounds were distributed last year alone.

Extension has provided leadership to this non-profit organization since its beginning. The Virginia Tech Center for Volunteer Development assisted with the by-laws and helped organize a board of directors. Two Extension agents are serving on the board. Extension has also provided leadership in developing a monitoring system, selection of board members, developing recipes, and establishing three branch food banks.

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In Fairfax County, many young people have joined 4-H because of what they saw at the annual 4-H fair. The Fairfax Extension office uses this once-a-year "splash" program to attract new members and to inform the public about what 4-H is doing in the community.

According to Extension agent Ann E. Gurney, the fair succeeds in both of its objectives. "We always have a significant increase in calls from young people wanting to know how to join 4-H immediately after the fair. As for reaching the people, this year's event attracted an estimated 7,000 persons."

Forty superintendents are selected to be in charge of twenty-two departments. Each superintendent develops his or her department to coincide with a written job description. The plan includes space preparation, accepting exhibits, obtaining and training judges, awarding ribbons, keeping records, and the myriad of other housekeeping chores associated with such an event.

A 4-H fair board was organized more than twenty years ago to run the event. Of its forty-five members, about two-thirds are young people. Through the cooperation of the local park authority, the board uses Frying Pan Park in Herndon for the event, generally held on the first weekend in August.

The planners work hard to keep out commercialization. No admission is charged with the resources from its operation coming from local businesses, 4-H, Extension

Homemakers clubs, and individuals.

Between 250 and 300 4-H'ers participate in the program. They exhibit a host of items in a variety of classes, including vegetables, clothing, food preparation, flower arranging, tot care, home environment, natural sciences, woodworking, photography, and record books.

"It's a lot of work," says Gurney, "but everyone connected with the event feels they get something out of it. And it has proven to be a good way to inform many who are not aware of 4-H about the benefits of the program."

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The survival rate for vegetable cooperatives is shocking. Virginia Tech Extension agricultural economist James B. Bell found this out when he headed a study to determine the status of the South's vegetable cooperatives.

"We located close to one hundred marketing cooperatives that were organized within the past twenty years. Their survival rate was shocking as less than ten survived for more than five or six years," Bell says.

The survival rate is improving as microcomputers and computer programs are helping to improve the efficiency of cooperatives. Bell is working with a number of cooperatives to improve their marketing and operational efficiency. He also is conducting educational programs for those in the member-owned firms.

"Vegetable cooperatives can provide the avenue to increased profits if enough homework is done. It's terribly important, however, that a community or group of producers not jump into the first thing that comes along," Bell says.

He advises that the community or group set objectives, analyze the situation, look at available resources, consider the interest of the individuals in the community, and then pick the direction that is desired.

□

Recipes for specific seafoods to meet specific needs will someday be available from Extension offices along the Atlantic seaboard and even from computers at some grocery stores. Researchers in Virginia Tech's College of Agriculture and Life Sciences, funded by the Mid-Atlantic Fisheries Development Foundation, Inc., have created a computerized seafood recipe file.

After two years of developing, analyzing and testing, the service is halfway to the consumer, says dietitian Ellen Coale. Consumers will be able to select recipes according to species and seafood type, type of recipe, number of servings, cooking method, occasion, preparation time, texture, and amount of calories, as well as carbohydrates, cholesterol, fat, protein, potassium, saturated fat and sodium levels. The latter will be requested by high, moderate, or low ranges but the readout will provide the exact amount.

Tech Extension food scientist George Flick sees the project as a way to encourage more use of seafood in general, and its use in special diets.

Jim Pemberton, computer programmer in the department of food science and technology at Tech, designed the program. Donna Soul, Extension seafood specialist, evaluated and tested the recipes for the data base and Coale analyzed them for calories, sodium, and other nutrients.

□

The best crop insurance package for a farmer can now be determined with the aid of a computer program developed by Virginia Extension.

James Moore, Extension agricultural economist, says the program should be available in Extension offices this fall. The program, first tested in Northumberland County, allows farmers to calculate the best form of coverage according to their base yield.

The new crop insurance policies calculate coverage based on individual farm yields, rather than average county yields. County Agricultural Stabilization and Conservation Service offices can compute farmer's base yields with ten years of back averages. An indexed yield can be calculated, however, with a minimum of three years average.

Currently, crop insurance premiums range from two to fifteen dollars per acre for various crops. Farmers can insure for payments of fifty, sixty-five, or seventy-five percent of their average yields. Insurees can choose one of three prices per bushel for each crop for insurance claims.

Moore says the new computer program can make arriving at these decisions much easier by providing a response tailored to each individual farm situation. He adds that insurance is an important investment, although those farmers who benefit most from it are those who can least afford it.

Study To Determine State's Agricultural Future

A study of the future of agriculture, forestry, and food industries in Virginia, originally aimed at helping Virginia Tech's College of Agriculture and Life Sciences plot its future, has been broadened to include helping agricultural interests in the Old Dominion plan for continued prosperity in national and international markets.

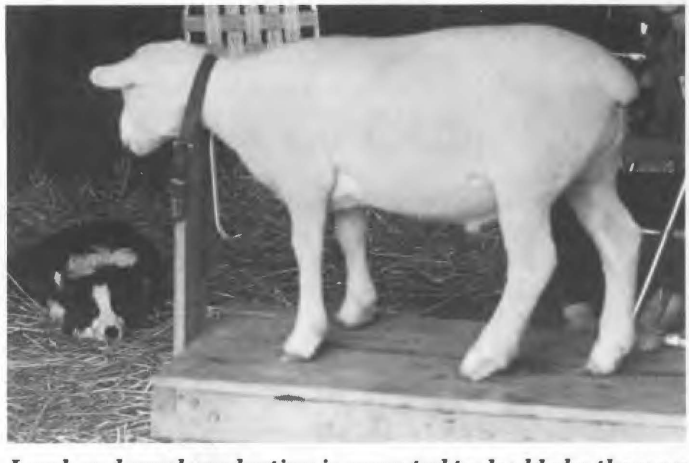
At Tech's Agri-Tech '86 celebration in July Virginia Governor Gerald Baliles asked that college officials enlarge the scope of their study to include a critical evaluation of not only the industry, but of government, particularly on the state level. "Wherever state government impedes progress on the state level, I want to know about it," he says.

Baliles asked for the report by January 1 so that he could come up with a plan by March 1 that would ensure that "agriculture would become the cornerstone of the economic development strategy for Virginia."

The study to look at the state agricultural picture as it affects the Tech college was begun late last year. The first phase, which was reported on at Agri-Tech '86, was begun to allow the college and Extension staff to clarify their views of where agriculture is going in Virginia.

The second phase, the one that the governor has expressed interest in, will include getting opinions and information from all phases of the industry, including forestry, natural resources and food components, state and federal agencies, and from the general public. Hearings were conducted across the state so that all interested citizens had an opportunity to give their suggestions.

The goal, according to James R. Nichols, college dean, is to chart "a course for the future which will propel Virginia to the international prominence that is consistent with our heritage, geography, and superb natural resource base."



Lamb and wool production is expected to double by the year 2000.

The phase one report includes an overview of global issues, a rundown of challenges and opportunities in each region of the state, a summary of statewide challenges and opportunities, and an examination of issues in teaching, research, and Extension.

Extension agronomist George Hawkins, a member of the study steering committee, says the study identifies lack of profit as the number one problem facing Virginia farmers. For farmers in Eastern Virginia, "operating expenses now range from ninety-two cents to one dollar and twelve cents for each one dollar's worth of product they produce."

Hawkins says that farms and forests are factories and must operate as "businesses, producing a product as efficiently as possible to reduce costs, because prices are not going to increase." Farmers, foresters, and food processors are going to have to do a better job of marketing. Virginia is in a prime location to successfully compete for agricultural markets—"Richmond is within 400 miles of sixty percent of the nation's population."

Extension animal scientist Ike Eller, who looked at the future of the state's commodities, anticipates change in the next fifteen years. He foresees production of feeder cattle to increase by 25 to 30 percent, broiler numbers to rise by 50 percent, and tobacco production to drop between 30 and 50 percent. The latter would be a blow to the state's economy because the processing of tobacco multiplies its worth by eight times its value at the farm gate.

Lamb and wool production is expected to double by the year 2000, Eller says. Timber, for which processing adds twenty-seven dollars to every one dollar of stump value, is expected to rise between 25 and 30 percent. Increased cultivation of small grains, which grow well where corn struggles, was predicted.

Eller also foresees greater development of the greenhouse/nursery industry and vegetable production. The turfgrass industry offers great market

Tobacco production may dip as much as 50 percent in the next fourteen years.

The number of feeder cattle may increase by as much as 30 percent by the year 2000.

potential. Statewide, there is a great opportunity for the processing and seafood industries.

Agricultural economist David M. Kohl painted a pessimistic picture of today's agriculture but remains "cautiously optimistic" about the industry's future in Virginia. Kohl, who examined agriculture from a nationwide perspective, predicts that rural communities will suffer as farming undergoes change. Forty to 50 percent of the jobs related to farming could be lost in some communities and, as the tax base erodes, pressure will be put on the remaining farmers to provide local services.

Kohl says the number of commercial farms will decrease greatly by the year 2000, with the number of "megafarms" doubling, while the traditional family operations, those with gross farm incomes between $40,000 and $250,000 annually, will decline. He also expects family ownership, rather than some form of corporate investments, to control the megafarms. Outside investors tend to seek higher returns and lower risks than those offered by farming. Small "lifestyle" farm numbers, however, will increase, he says.

Kohl's optimism stems from Virginia's being near population centers, the opportunity to "create new niches for new products," being able to capitalize on the state's forest products and recreational opportunities, and Virginia's strong agribusiness structure that is "in tune with consumer trends."

Herbert H. Stoevener, head of the department of agricultural economics and chairman of the study, points out that "all problems are not related to marketing—marketing does not mean higher prices, just the best prices." He believes it is essential for Virginia to maintain its production potential and its human resources for farming. New modes of cooperation between the college and the processing industry are needed to explore new product development.

But Stoevener says there are also limits to focusing on profits. "There are non-market benefits of agriculture, having to do with natural resources, that do not show up on profit ledgers. We are missing the boat if we only focus on profits," he says, "without giving a thought to the recreational and lifestyle benefits of rural living."

Mitchell R. Geasler, university vice provost and director of Extension, says it was time to take some risks and "make some bold statements for public reaction." He raises several issues that need to be examined when looking at agriculture's future.

He suggests considering such issues as the future position of large, specialized commercial farms as well as the smaller part-time operations. He asks if there are ways to develop commodities which can be direct marketed. He wonders if adequate study has been given to consumer preferences and consumption patterns, asking "What commodities can be developed to market to these consumers?" He questions if consumers are willing to continue to pay taxes for a safety net for agriculture and research.

Geasler asks if industries can be located in rural Virginia that could capitalize upon a labor force of part-time farmers. He wonders about water quality and the possibility for close relationships with those countries which need the products that Virginia is best suited to produce.

"The market structure is in the process of improving," he says, "and the state government has a strong commitment to agriculture." This commitment was borne out by Baliles' request for the Virginia Tech study.

Study will be "missing the boat" if no thought is given to "the recreational and lifestyle benefits of rural living."

PEOPLE

Rosetta Harris:

A Natural Leader

Rosetta Harris isn't the kind of person to let a setback get her down. Defeated in her initial run for a seat on Bridgewater town council two years ago, she decided to make another attempt for office this year. The result is that the Rockingham County community's governing body now has the first two women members in its history.

Harris and another Bridgewater resident, Nancy Trout, achieved that honor during the past summer election. It is an accomplishment of which the West Virginia native is obviously proud. "I felt I had something to contribute, and so I decided to run. After losing in '84, I thought about it for a while and decided to make one more try at the office. Obviously, I am glad I did," Harris says with a grin.

Elected office is only the latest example on a list of personal services for her Shenandoah Valley community. "I seem to have a knack at getting involved," she says. "I see a job that needs to be done and find myself trying to do it."

Her "can do" attitude has placed her in the middle of local causes and at the front of local organizations. She joined an Extension Homemakers club shortly after she moved to the community. She recalls that she got involved by helping out in an Extension food booth at the Rockingham County Fair and then joined a club.

Over the years, she has belonged to two homemakers clubs, Bridgewater Junior and Riverside. She was elected to most of the offices in both clubs and has served as president of the Harrisonburg-Rockingham County Extension

Bill Burleson Photos

Rosetta Harris is a doer.

Homemakers Council, an organization that represents twenty-seven clubs.

Her leadership abilities have led to recognition on the state level. She has been on the Virginia Extension Homemakers Council's Board for five years. She served two years as international program chairman, a year as finance chairman, and two years as secretary. This January, she begins a two-year term as VEHC vice president.

The divorced mother of two sons also has devoted a lot of time to youth organizations. She was an assistant cub scout leader when the boys were younger and helped to found a 4-H club. There also was a term spent as secretary of the parent-teacher association and time spent working as a band booster.

The oldest boy, Kevin, twenty-one, is now in the Air Force in Arkansas, but the youngest, Dana, fourteen, is just becoming involved in high school activities. His being a member of the football team accounts for her membership in the high school athletic association. Dana's love of animals also causes yearly negotiations with a nearby farmer so that he can raise four head of cattle for his projects and participate in livestock shows.

She is past president of the women's fellowship, a deaconess, and former director of Christian education and volunteer ministries at the Bridgewater Church of the Brethren. It was in the latter position that she arranged two exchange programs, one for adults and another for young people, in Germany. She chaperoned both groups and made the home arrangements when the German delegations returned the visits.

She recently has been named to the self-study evaluation committee for Turner Ashby High School.

Harris is quick to point out that much of her community involvement would not have been possible without the approval of her boss and of the firm for which she works as an executive assistant and office supervisor. "Both Dominion Farm Loan and James L. Grove, its executive vice president, have a long history of supporting Extension, 4-H, and FFA. They have been generous in their support of my efforts. Otherwise, I could not have been involved in as many activities as I have been."

Rosetta Harris talks with town superintendent Bob Holton.

Michael Goldwasser:

A Quick Learner

Michael E. Goldwasser of Rt. 1, Hillsville, says he is living proof that there is truth to the old saying that "ignorance is bliss." The forty-two-year-old beef producer even calls his decision thirteen years ago to enter the cattle business a "stupid move."

Goldwasser says, "I didn't know anything about farming or raising beef cattle. All I had were a willingness to learn and a little money to make a down payment on this farm. If it hadn't been that a lot of people were willing to help me along, I never would have made it."

Those "people" Goldwasser credits with providing the assistance that allowed him to make it in farming include Carroll County Extension agent Thomas E. Tabor III, the Extension specialists on the Tech campus, and, "last but certainly not least," his neighbors.

"If I had any idea of what I was getting into, I wouldn't have done it. It just was a case of not realizing all that farming entails. When I didn't know what to do, I would ask someone and they would tell me. When I think back about what I did and how little I knew, it scares me."

The fact that Goldwasser has learned his profession was evident earlier this year when he was named the outstanding forage producer in Southwest Virginia by Virginia Forage and Grassland Council. It also signified that Goldwasser, who had never lived too long in one location, has found a home in Southwest Virginia.

On the road to Carroll County, Goldwasser was raised in Illinois, got a sociology degree from Carleton College in Minnesota, spent a year at the University of Pennsylvania Law School, worked for three years in Tanzania and Uganda as a member of the Peace Corps, taught science at a high school in Massachusetts, and helped other Peace Corps volunteers learn about life in Uganda.

It was while he was teaching new volunteers about life in Uganda that he met his wife, the former Marion McAdoo of Philadelphia, who was also on the teaching staff. It was her acceptance of a teaching job in Carroll County that led to the family living there.

Bill Burleson Photos

Michael Goldwasser keeps close watch on cattle prices.

Goldwasser purchased eighty-eight acres of land in 1973, much of which he had to clear himself. Currently, they own nearly 300 acres and rent another 300 acres. He won't rent pasture that has not been well cared for.

Improved pasture, hayland, and stockpiled fescue provide a high quality ration for his commercial cow/calf herd that he maintains all year. Goldwasser also grazes about 400 commercial stocker-

Marion and Michael Goldwasser pause a few minutes to play with their daughters, Sarah, five, and Ellen, one.

yearlings before sending them to feedlots for final finishing.

He stocks heavy in the spring, moving some 200 to 300 feeder cattle on and off his pastures by July. He sells the larger animals in July and keeps the lighter cattle all summer.

Goldwasser keeps a close watch on prices. He either sells them directly out of the field to a dealer or by way of tele-auction or sends them to a midwestern feedlot. He determines the best course by looking at the futures market and the current market situation. "You have to use your pencil to determine when is the best time to sell."

Goldwasser is constantly looking for ways to raise and sell bigger and better cattle more efficiently. That is why he is an advocate of rotational grazing, using up to ten pastures in rotation in an intensive grazing system. It is a method he says that could change "beef farming in Virginia."

Rotational grazing, he says, reduces pasture stress, lets the cattle use all of the available grass, not just that at the bottom of a hill, and helps to control erosion. The practice allows the producer to stock more cattle and reduces parasite problems. It only takes a small investment to intensively manage the pastures—a good charger and two high tensile wires. He says the cattle use all the pasture which convinces him "that it is good business to take your cattle off a pasture for awhile."

Goldwasser's new approaches have gained him respect within the industry. He is vice president of the Galax Feeder Cattle Association and is chairman of the Carroll County farm management group. He also is a director in the Virginia Cattleman's Association and the Southwest Virginia Agricultural Association.

His late entry into farming may be the advantage, Goldwasser believes, that has enabled him to develop a successful beef cattle operation using grass. "I wasn't raised on a farm and so was not wedded to any one way of doing things. I could do what I thought worked best for me and my cattle. Thankfully, most of the practices worked."

Hardwoods Mean 'Mushrooming' Business

By Sherrie Whaley

Buddy Hale is on a crusade to help save the family farm.

The Madison County farmer is spreading the message throughout Virginia and even nationwide that, with a little creative thinking, farming can still be a profitable endeavor.

Hale, a fourth-generation dairyman, is basing his claim on his success with shiitake (she-tah-key) mushrooms—a unique crop that he feels could provide much-needed relief to financially-strapped farmers.

Hale's optimism is shared by Madison County Extension agent Andy Hankins. "Growing mushrooms has been considered an off-the-wall type of enterprise," says Hankins. "However, as more people learn of the profit potential, that stigma is fading."

Evidence to support Hankin's statement is apparent in the increased interest that Virginia farmers and entrepreneurs are showing in shiitake. Not your run-of-the-mill mushroom, shiitake is known in both Japan and China as "the emperor's mushroom" and has been recognized down through the ages as a precious delicacy.

Centuries ago, Samurai warriors living near forests where wild shiitake grew would claim the entire forest as their own and forbid others to collect the mushrooms. Eventually, Japanese scientists discovered how to cultivate the mushroom on logs, and today the tiny country exports more than $15 million worth of shiitake yearly into the United States.

Buddy Hale says mushroom growing "isn't for everyone."

Bob Veltri Photos

Shiitake mushrooms, worth up to ten dollars a pound, respond well to Virginia's warm days and cool nights.

"There's no reason why Virginia can't get in on the action," says Hankins. "Every area of the state is suited to growing shiitake. They respond to warm days and cool nights and grow well in our climate."

Buddy Hale has been turning a good profit with shiitake since 1982 and has become something of an expert at the intricacies of shiitake farming. He and his wife, Pauline, tend a 9,000-log operation which yields about 150 pounds of the exotic fungi weekly in peak season.

Operating under the name of Haleson Hills Mushrooms, the husband-wife farming team sell their large, flat, creamy-brown crop wholesale to an established produce dealer who delivers to restaurants and supermarkets in the Washington, D.C., Richmond, Norfolk, and Winston-Salem areas.

A pound of the fleshy fungi is selling for five dollars wholesale and eight to ten dollars retail—incentive enough for many people to take a stab at raising the specialized crop. But growing shiitake is not a get-rich-quick, low-labor proposition, warns Hale.

"The first thing I tell people," he says, "is that they should get into it in a small way. It's not for everyone."

Hale heeded his own advice, planting a few logs after his father, William, suggested raising mushrooms. "My father read about an outfit in Buckingham County that was raising shiitake and decided to look into it further," he explains. The elder Hale

made a visit to Elix Corp., now the oldest and largest shiitake producer in the state, and came back excited about what he had seen.

"I figured it was just a waste of time," Buddy admits, "but I went ahead and cut a few logs and planted some spawn." Today, the Hales are considered veteran growers in the infant industry.

The intensive process of growing shiitake begins by cutting hardwood logs (preferably oak) during the winter months when tree sap is low. The logs are then loosely stacked outdoors and cured for three to 12 weeks to reduce the wood's moisture content.

In March and April, approximately twenty half-inch holes are drilled into each log and the holes are inoculated, or planted, with mushroom spawn. The spawn mixture of sawdust, millet, wheat germ oil, and shiitake spore is placed into each hole, which is then sealed with a styrofoam plug.

The impregnated logs are stacked outdoors in a shaded area, either tick-tack-toe style or in tepee formation, and sprinkled with water. When the end of the oak log begins to show white rings, or mycelium, the root network is healthy and the log will begin to fruit in approximately four months.

"The biology of the shiitake is amazing," says Hankins. "The mycelium moves through the wood, secreting an enzyme that breaks down the cell wall." When the mushrooms fruit, they actually break through the bark of the log.

Fruiting occurs naturally in the spring and fall, but can easily be induced by soaking the logs to increase their water content, the Extension agent explains. Mushrooms begin to appear about a week after soaking and must be picked off the log daily during the fruiting period. After harvest, the log is rested for forty-five to sixty days, then soaked and harvested again.

"Logs are only planted with spawn once, but will continue to produce for about five years until the wood starts to decay," Hale says. The forty-two-year-old farmer averages about two pounds of shiitake a year from each log.

Once picked, shiitake can be marketed either fresh or dried. Fresh shiitake must be refrigerated and has a shelf life of only a week to 10 days. Growers who are not located near a major market can dry their mushrooms with forced air or sunlight and sell the dried fungi for fifteen to twenty-five dollars per pound.

Logs are housed in greenhouses for the winter mushroom crop.

Richard Ulf has introduced hundreds of people to the Shiitake.

"The demand for these mushrooms is just tremendous," says Hankins. "Restaurants, supermarkets, health-food stores and even a major soup company are snatching up available supplies." Hankins and some Extension cohorts are in the process of organizing a marketing cooperative that will assure buyers of a steady supply and prevent growers from competing against one another.

While Hale has had good success in the wholesale arena, growers like Richard and Margaret Ulf of Culpeper County are just as pleased with their retail sales to the public. Their Merymede Farm, located just off Route 211 in Amissville, attracts Washington, D.C. commuters, tourists, and local folk.

"We've introduced literally hundreds of people to shiitake," says Richard, a retired Marine and civil engineer. "We're getting a lot of repeat customers now."

Ulf, who serves as vice-president of the newly-formed Appalachian Mushroom Growers, has 1,000 logs fruiting and just this year planted another 4,000.

"Shiitake is not something that everyone is interested in like apples," says Ulf. "The customer profile is fascinating—everything from yuppies to retirees come out to buy our mushrooms." The Ulfs

Margaret Ulf bags some mushrooms for a customer.

Pauline Hale checks one of the large mushrooms.

have even had customers looking for hallucinogenic mushrooms. "They were disappointed when they found out that shiitake were for eating and not smoking," laughs Ulf.

Selling his mushrooms for nine dollars a pound has been a profitable sideline for the lanky retiree. He supplements this income with a one-acre pick-your-own vineyard, a few beef cows, and furniture-making.

Ulf sings the praises of shiitake to anyone who is willing to listen. "I imagine it would be difficult for a salesman to sell a product that he really wasn't mad about," Ulf says. "I'm definitely mad about shiitake. They have the greatest taste of any mushroom."

In addition to their distinctive woodsy flavor, shiitake have a firm meaty texture. They can be used in any recipe calling for the common mushroom, have twice as much protein, and shrink less. Shiitake are rich in calcium, potassium, phosphorus, iron, and vitamin D. Plus, they contain lentinacin, which lowers cholesterol levels and, in turn, lowers or helps prevent high blood pressure. All this, and the shiitake contain only about ninety calories per pound.

Hankins sees mushroom farming increasing a great deal in years to come. One indication was a turnout of more than 230 people at an Extension mushroom conference held on a snowy February day.

Another appealing feature of shiitake is the relatively small investment needed to get into the business. "All you need is a chain saw, a pick-up truck and an electric drill," Hale explains. As the industry expands, however, a heated shelter may also become an essential.

Both Hale and Hankins believe that wintertime production will be the key to Virginia success. "If we're to be competitive in the marketplace, we must be able to supply mushrooms year round," says Hankins, a mushroom grower himself. "The market is at its highest point during the winter."

Hale uses two propane-heated greenhouses for his winter mushroom crop. He's had only limited success so far, averaging half the yield of outdoor production. "Compensating for mother nature is a problem," he admits. "You can do anything you want, but mother nature can always do it better." He's testing several different techniques as he searches for the best method of indoor production.

Much of what Hale and Ulf have learned has, in fact, been through trial-and-error. "Andy Hankins has been a real help," Hale says, "but a lot of research is needed on when, why, and how to do certain things."

Despite the time they've devoted to developing mushroom know-how, neither grower hesitates to share his shiitake secrets. In fact, the craft has opened a whole new career for Hale who is working as a consultant to other growers. "I guess I've started close to 100 people in the business," he says.

While both Hale and Ulf have been pleased with shiitake as a supplemental crop, both are cautiously optimistic about the future of their pioneering venture. "I'm still not convinced that there aren't some unknowns we haven't run across yet," Ulf says. Then, smiling, he quickly adds, "But it's been everything I'd hoped for thus far."

For more information on growing shiitake, contact Andy Hankins, P.O. Box 10, Madison, VA 22727 / (703) 948-6881 or request the free Extension publication, "Shiitake Farming in Virginia" through your local Extension office.

The publication can also be ordered directly from the Extension Distribution Center, 112 Landsdowne St., Blacksburg, VA 24061. Be sure to include the publication number 438-012 with your request.

Competition Is Fierce In Augusta County

For more than forty years, the coming of spring has meant that Augusta County 4-H and FFA members have had to be ready for the annual county market livestock show and sale—the largest county livestock event in the state. During its forty-one years, the annual event has given thousands of young people the opportunity to polish their show skills and earn some money for their efforts.

This year's show was no different. The more than 250 cattle, hogs, and lambs that moved through the show ring at the Staunton Union Stockyards gave the young exhibitors additional experience in showing and more than $100,000 from a group of public-spirited buyers who were willing to give a helping hand to young people.

The buyers did not come to the sale by chance, either. Not only did members of the sponsoring Staunton-Augusta County Chamber of Commerce and the county Ruritan clubs encourage their membership to participate, the 4-H and FFA members wrote letters to potential buyers, asking them to bid on their individual animals.

"Some of the youngsters wrote as many as twenty-five letters," says county 4-H Extension agent Charles Goodman. "And many of those who came to bid had two or three letters from youngsters, and those youngsters' animals were the ones they bid on. You can almost go down the list of sale prices for the animals and tell which of the entrants wrote letters to sponsors."

The sponsors paid an average of $100.51 for each of the 104 lambs at the sale; $131.78 for each of the thirty hogs; and $734.59 for each of the 122 steers. The average per-pound price for each of the nearly 160,000 pounds sold at the sale was $1.53.

In the friendly competition between 4-H and FFA members, this was 4-H's year, with all but one of the champions or reserve champions being owned by 4-H'ers. Next year, however, the results could be reversed.

It was an event that the late Charles Frank Clement, an Extension agent in the county for twenty-one years, would have been proud of. The sale was dedicated to him.

In the lamb competition, spectators began to wonder if the McClure family was forming a dynasty. Sixteen-year-old Victoria McClure, a member of the R.L. Coffey 4-H Club, had the grand champion lamb. She later saw a local tire company buy her winning animal for four dollars a pound, or $480. It was the second consecutive year that a McClure has owned the grand champion lamb. Last year, Victoria's fourteen-year-old sister, Elizabeth, had the grand champion. The two—along with their ten-year-old sister Mary, who also shows lambs—promise to present formidable competition in the future.

Bill Burleson Photos

Marsha Western, thirteen, of the Willing Workers 4-H Club, concentrates on getting her hog ready for the show.

Mart Moore, a member of the Augusta County 4-H Club, saw his reserve champion sold to a farm equipment dealer for $2.10 a pound, or $199.50. The champion pen-of-three lambs, owned by Lesley Ruleman of the Beverley Manor 4-H Club, brought their owner $372, while the reserve champion brought fellow club member Dean Shuey $333.90.

Kim Harlow of the North River Community 4-H Club managed a "grand slam" in the hog competition, having both the grand champion and the champion pen-of-three hogs. A grain company paid $310.50 for her grand champion, and the livestock market paid $333.75 for the two remaining hogs.

A local car dealer paid Danny Jordan, also of North River 4-H, $184 for the reserve champion hog, while Duane Harlow, Kim's brother, received $386.40 from a Bridgewater construction firm.

Bryson Michael, thirteen and also of the North River 4-H Club, had the pleasure of winning his second show (he had the grand champion in 1983). A local car dealer paid him $1.52 a pound, or $1,846, for his cross-bred steer.

Doug McAllister, a Fort Defiance FFA member, got one dollar a pound, or $1,260, from a local restaurant for his reserve champion.

"It's a county event and everyone supports it," says agent Goodman. "Even those businesses that have little interest in agriculture send representatives to bid on some animals. Everyone wants to help out the young people."

Extension Homemakers Come Home to Virginia

By Mary Ann Johnson

Fifty years after its founding, the National Extension Homemakers Council came to Virginia to meet at Virginia Tech in Montgomery County, the home of its first president, Mrs. Guy Roop.

The Virginia members, under the leadership of Barbara Hanson, Arlington County, planned and worked for several years before the "kick-off" event brought about 3,000 conference visitors to the campus. It was NEHC's second visit to Tech, the first being when the national meeting was held during the University centennial celebration in 1972.

Celebrating the 50th anniversary theme, "Honoring Yesterday, Living Today, Building for Tomorrow," the conference offered the participants from forty-four states and Puerto Rico the opportunity to be enriched in mind and spirit.

Participants learned about those who had come before at the premiere performance of the NEHC oral history "Rich Lives." The show is based on the book, "Voices of American Homemakers," by Eleanor Arnold, a work that featured stories from NEHC members from throughout the United States. Naomi Thomas of Frederick County, VEHC oral history chairman, introduced the show.

The parade of states, with a Virginia hostess accompanying each state president, and recognition of the 50-year clubs highlighted the opening session which started a week of educational sessions, social receptions, and entertainment. The members were prepared to participate in leadership positions by participating in sessions in the new family and community leadership program.

Evenings were filled with special dinners and receptions. Virginia Night, organized by Rhoda Maddox of Winchester, featured a meal of Virginia agricultural products and a concert by native Virginian Roy Clark. Many Virginia leaders, including Governor Gerald L. Baliles, also were on the program.

A spectacular fireworks show ended the fiftieth anniversary celebration, but the Virginians remained on campus to hold their annual meeting. The more than 600 Virginia Extension Homemakers Council

Bob Veltri Photos

Eleanor Whittemore of New Hampshire, national NEHC president, and Barbara Hanson of Arlington, conference coordinator, seem pleased about way meeting is going.

Margaret Robbins, of Middlesex County, helps Jean Ann Moon, Alabama state president, open present she was given at the state presidents' reception.

Dot Oliver of Nottoway County, former state VEHC president, is accompanied by Becky Bowling of Buckingham County, current state president, in the parade of flags at the opening ceremonies.

members who participated in helping make the national meeting a success could be excused for entering the state meeting with a feeling of self satisfaction.

Karen DeBord, Virginia Tech Extension specialist, worked with the homemakers in arranging the many details connected with the conference. Heading the major committees for the event were: Sally Paxton, Prince William County; Dot Oliver, Crewe; Geraldine Marshall, Appomattox; Ethel Cannon, Norfolk; Betty Donovan, Giles County; Olivia Hughes, Rustburg; and Billie Cline, Montgomery County.

Helen Leonard, of the American Council of Life Insurance in Washington, was a featured speaker at the conference.

Some of the 50-year members in Virginia Homemakers pose for a picture. They are, from left, front row: Margaret Lee, Appomattox County; Katrine Sensabaugh, Lee County; Etta Cassell, Wythe County; Fannie L. Dyer, Henry County; Salle Kate Hammer, Highland County; and Frances Moffett, Fauquier County; and, back row, from left, Lelia Sibold, Rockbridge County; Maggie Horsley, Henry County; Pearle M. Spear, Newport News; Mildred Minter, Henry County; Alice Merriman, Henry County; Margaret Trahan, Hanover County, and Mildred Dix, Wythe County.

Judy Weinkoff of Oklahoma, national NEHC chairman for safety and emergency preparedness, talks to speakers, left, Denny Abbott of the Florida firm of Adam Walsh Child Resource Center Inc. and Ken Wooden of the ABC News program, "20/20."

Warm temperatures didn't dampen the opening program in the Rector Field House.

The Henrico Funtones, under the direction of Charlotte Ganzert, proved to be one of the hits at the conference.

IN BRIEF

NEWS OF INTEREST FROM ACROSS VIRGINIA

Chandler and McAlister

Virginia Extension's community resource program has received the highest award given by the Virginia chapter of the American Planning Association for its certified planning commissioners program. Extension specialist *R. Michael Chandler,* in cooperation with John Marlles from the Virginia Department of Housing and Community Development, developed the program over a two-year period and offered it for the first time last year.

Forty-three of the forty-five participants from twenty-seven Virginia communities completed the initial offering. The Virginia certified commissioners program is said to be the most comprehensive offering of its type in the United States.

J. Douglas McAlister, head of community resource development at Tech, praised Chandler for his "untiring efforts in formulating a comprehensive program."

□

Ninety hours of farm marketing instruction attracted Virginia Extension agents to the classroom this summer. The three-week training school, directed by Extension agricultural marketing economist David E. Kenyon, concentrated on the subjects of grain and livestock marketing.

Faculty members from Tech's department of agricultural economics conducted intensive sessions on cash contracting, futures, options, developing a marketing plan, evaluating government programs, charting and analyzing futures prices, and the fundamentals of price analysis for grain and livestock.

In addition, the agents received first-hand experience at speculation, developed and executed a farm marketing plan, and learned how to use spreadsheets for marketing decisions.

The overall objective of the training school was to enable agents to carry out a marketing program in their localities. A second effort will be offered to agents next spring.

□

Hanson, Harris, and Marshall

Barbara M. Hanson of *Arlington County* has been chosen president-elect of the Virginia Extension Homemakers Council (VEHC). She will serve one year working with the current president, *Becky Bowling* of *Buckingham County,* before assuming the presidency.

Two other officers were elected at the annual meeting at Virginia Tech. The new vice president is *Rosetta Harris* of *Rockingham County* while *Geraldine Marshall* of *Appomattox County* is the new treasurer. Other officers who are completing their two-year terms of office are *Wilsene Scott* of *Rockingham County,* secretary, and *Isabel W. Fambrough* of *Louisa County,* parliamentarian.

The VEHC represents more than 700 clubs with 12,000 members in communities throughout the state. Its members work with Virginia Extension to learn how to improve life for themselves, their families, and their communities.

□

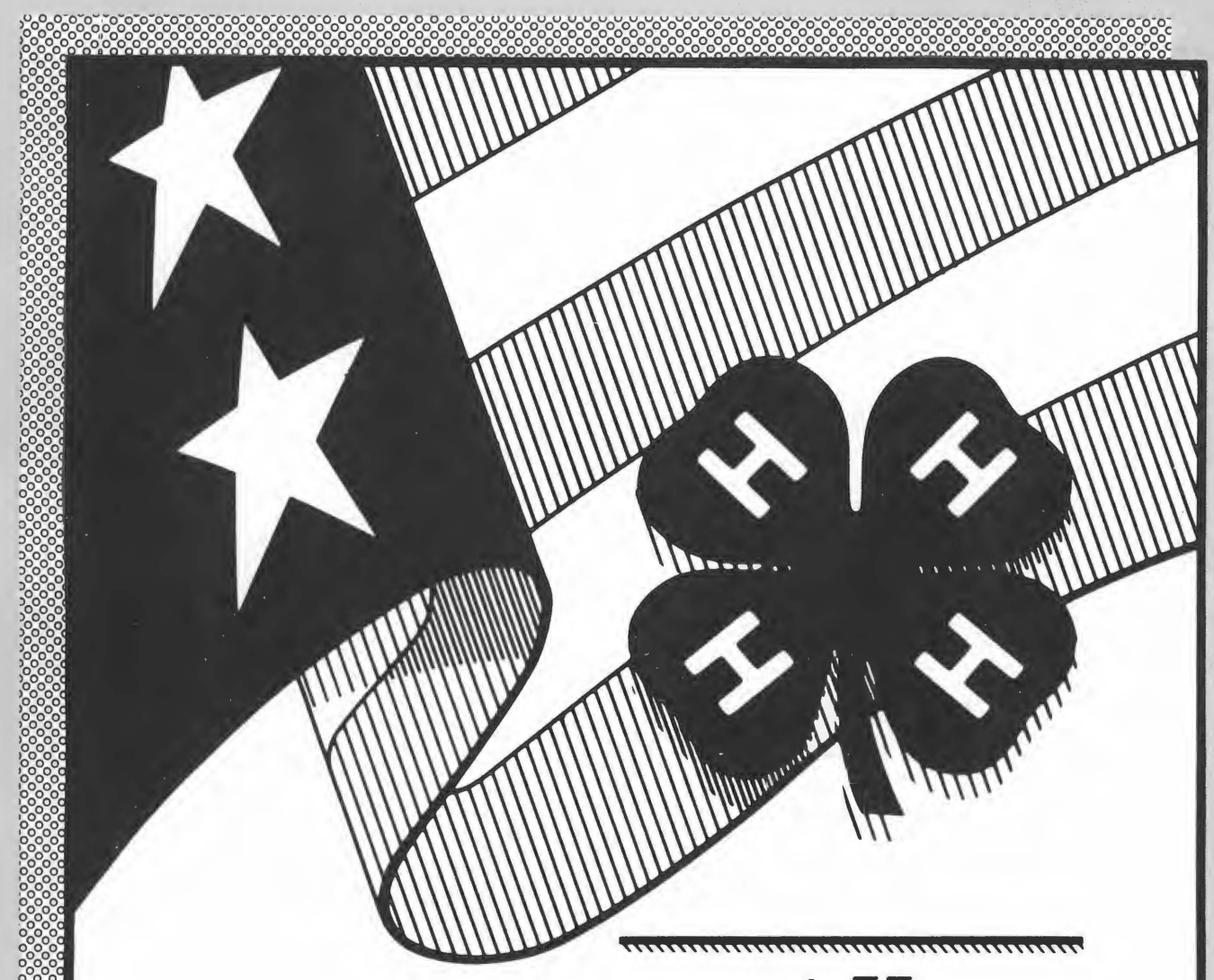
Lyle, Christian, Papierniak, and Carpenter

4-H has four new cabinet officers who are busy planning next year's congress on the Virginia Tech campus. Heading the cabinet as president is *Ernie Lyle Jr., Bath County.* Other officers are *Linwood Christian, Petersburg, vice president; Melanie Papierniak, Frederick County,* secretary; and *S. Tris Carpenter, Fairfax County,* reporter, historian.

□

The newest member of the Virginia Agricultural Credit Commission is Prince Edward County Extension agent Kylor B. Reed. He was named to the post by Governor Gerald Baliles. The commission is responsible for monitoring the credit situation and making recommendations on how it can be improved.

□



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