

This procedure cuts down on the number of persons contacted in a given day and increases the need for additional county personnel.

In spite of these problems, 1960 had many satisfactory successes and many people were assisted in setting goals and in reaching goals already established as results of contacts with Extension. The county is going through many changes and generally the people are progressive and open-minded to new ideas. Extension rates high as a source of reliable and useful information. The urban people are finding out that the service includes problems of the home grounds as well as the farm.

EVALUATION AND SUMMARY

Chesterfield County, located in an area surrounded by four urban centers, offers a very attractive opportunity for part-time farming and rural living. The people working in these cities or industries located in the county, demand many urban services, thereby pushing taxes higher. This puts the commercial farmers in a less favorable position than farmers in neighboring counties. Most of the available farm land is selling from two to four times its agricultural value. Farmers are continuously harrassed by real estate agents and developers to sell their farms for sub-division. The requirements for good farm land and a good sub-division are very similar. The number of farmers has changed from 1422 in 1950 to 533 and the population has increased from 40,000 in 1950 to more than 71,000 in 1960.

Since many of the people have purchased the farms and rural residences comparatively recent they are still carrying pretty heavy financial obligations. This prevents their making many changes even though they realize that in the long run they would be improvements. Another characteristic of the people is that they have acquired the habit of calling a specialist for service and information which is not used every day. They get a lot of general information through commercial channels, newspapers, and the like; but they are not too interested in building up a back log of information by attending meetings, tours, demonstrations, etc., when they can get the Extension agent and the same information at very little inconvenience by calling him on the telephone.

Making business decisions for themselves, adopting wiser and better methods and advancing toward security are the rights and duties of every farm family. The Extension agent has been actively engaged in helping farm families reach business decisions. The agent acts as counselor and provides scientific information as background to discuss farm management problems the family faces in their daily work. This is being done through the farm and home development approach. This phase of the work cannot be carried out by the mass approach. There is of necessity a need for personal contact on advisory or counselor level. This is true not only for the commercial farmers but also the part-time farmers too. Also there is an obligation to the many home owners of the county.

COMMUNITY IMPROVEMENT AND PUBLIC AFFAIRS

Producer-Consumer Relations

Chesterfield County is predominantly non-farm. The non-farm needs and interests tend to over-shadow the farmers needs. The industries have a machinery tax rate of 75¢ per \$100 valuation, while the farmer pays \$2.70 (the same as personal property) on his machinery used in the production of agricultural products. There are many other misunderstandings between the farm people and those having primarily urban interests.

There remains a great need in our agriculture for advances in research and education, especially in the field of marketing and producer-consumer relationships.

In an effort to provide information as a basis of better understanding the agent has provided programs for the various organizations like Kiwanis (Farm-City Week), Junior Chamber of Commerce (Young Farmer Award), Farmers' Clubs, Buritan Clubs, Grange, Farm Bureau, and garden clubs. News stories have been aimed at better consumer understanding.

Another method being used is the organization of urban 4-H clubs. These youngsters are brought into contact with boys and girls from the farms and rural non-farm areas through county-wide meetings, recreational activities, camps, the county fair, and the 4-H shows and sales. Also Chesterfield 4-H'ers camp with rural counties, thereby bringing the youngsters in wider contact with rural and urban problems.

One 4-H club carried the Forestry Appreciation project.

Four farmers planted 46,000 pine tree seedlings this year on 115 acres. Additional planting was done by the pulpwood companies and non-farm woodland owners.

Continental Can Company, a large woodland holder in the county, recently purchased the Curtis Farm on Route 10 in Bermuda District. They have planted it to superior pine tree seed stock and to a pine seedling nursery. The agent worked with the foresters in charge relative to soils and weed control.

The agent assisted 4 farmers in getting forestry management advice from the Forestry Service. Farmers do not generally have a surplus of labor to make farm woodlot management profitable. There have been good employment opportunities off the farm for surplus labor.

Farmers have been building ponds for many years. They are now running into management problems. These include fish balance and weed control. The agent worked with 8 farmers on these problems and participated in two training sessions. One of these was a tour and demonstration put on by the S.C.S. Biologist, the other was put on by a V.P.I. professor.

Chesterfield was among the first counties of the state to have a soil survey. The report is out of print and many of the classifications were so general that it would be of little value anyway. A new survey is very badly needed. With our expanding population and the need for roads, schools, and housing sites as well as agricultural uses this survey would pay for itself in a very short time.

Based on the soil surveys made by the S.C.S. there are well over 75 different soil classifications in Chesterfield County. Many farms will have 8 to 10 different types. And all farms are not mapped. These varied soil types are caused by the influences of the coastal and the piedmont and the overlapping of them, as well as the river influences.

The 1939 Census of Agriculture shows that Chesterfield County has 79,933 acres of land in 533 farms. This is divided into 21,555 acres cropland, 41,703 acres farm woodland and 4,963 pasture that is not cropland nor woodland. The total pasture acreage (including 4,541 acres woodland pasture) was 13,423. The land area in farms was 79,783 acres in 1934.

The first coal mined in the United States came from this Triassic basin. The first period of continuous mining was between 1770 and 1780. A second period of activity began about 1843 and continued until 1877. About 1890 it was resumed and some production maintained until 1923. The coal is of bituminous rank and, though variable, of good quality. It has been estimated that more than one billion tons of coal occur in the Richmond basin. Granite of excellent quality for building stone and monuments has been quarried in the Richmond and Petersburg areas of the county. Reddish clay, suitable for brick, and sand and gravel occur locally.

Chesterfield County has approximately 225,670 acres of commercial forest exclusive of public reserved and other non-commercial forest land. (Peachontas State Park and Forest cover 7,604 acres in the center of the county). About 44.9 percent of all timber is softwood (loblolly pine, shortleaf pine, Virginia pine, and other softwoods), and 55.1 percent is hardwood (red oak, white oak, gum, yellow poplar, and miscellaneous hardwoods). The Virginia Division of Forestry estimates that the net volume of saw timber is 786,909,000 board feet, and the average annual cut runs around 5 percent of this.

CONSERVATION, DEVELOPMENT, AND USE OF NATURAL RESOURCES

Chesterfield County is well located to obtain large supplies of water by using either the James River on the northern boundary or the Appomattox River on the southern boundary. There are a number of good small streams in the county such as Falling Creek and Swift Creek. The lower James is tide-affected but is almost unlimited in supply. The long range plans of the county are toward obtaining a very large supply from the Appomattox by building a reservoir above Matoaca. This will be a joint effort among the adjoining counties and cities.

Farmers are building ponds at the rate of about 10 per year. This will continue but the S.C.S. Soil Scientist say that the good sites are getting harder to find and he expects more of the ponds to be bigger and more expensive to build.

Much of the residential part of the county has county water but wells are being dug every day. The eastern third of the county is underlain by a ledge of soft sedimentary rocks with a maximum thickness of about 600 feet near the eastern boundary. Ground water occurs in these rocks in beds of sand, gravel, and shell mark, of variable thickness. Yields up to 10 gallons per minute are obtained in many shallow dug or driven wells around 50 feet deep in the rural part of the county. In addition to the shallow beds, good water-bearing beds are found generally from 120 to 300 feet. Large supplies, up to about 300 gallons per minute, may be obtained from properly developed drilled wells in these deeper beds. The shallow beds yield soft water which is high in iron; the deep waters are likely to be hard, but otherwise of generally good quality.

The central part of the county is underlain chiefly by granite. Moderate to large supplies, up to 300 gallons per minute, of ground water of good quality may be obtained in the granite from wells ranging to 600 feet in depth.

A belt, approximately 8 miles wide, of the Triassic sedimentary rocks (sandstones, shale, conglomerates) and associated small bodies of intruded igneous diabase occurs in the western portion of the county. Yields of 1 to 50 gallons per minute of rather hard water have been obtained at depths of 25 to 190 feet in the sandstones; yields of 1/2 to 15 gallons per minute of generally hard water at 35 to 200 feet in the conglomerates. Water obtained from the Triassic rocks is likely to contain objectionable quantities of iron.

Summary

The 4-H Club work has grown and gained a favorable position in the minds of the public. This is evidenced by the support given the work by the governing officials, clubs, and other organizations, and individuals. The club members have gained the reputation of having only the highest moral, social, and spiritual ideals. They are dependable and are found in positions of leadership in churches, schools, and other organizations in their communities. We believe this indicates that the 4-H clubs are reaching the greater goal of "assisting in the development of boys and girls into useful and desirable citizens."

The greatest inadequacies are that there are still too few boys and girls reached. This can best be done by involving more local people as leaders, sponsors, and parents. A more concentrated effort will be made in this area in the future years, however, there will be no lowering of quality just to get additional numbers.

classes on various phases of safety. Camp gives 4-H'ers an opportunity to participate in a democratic society away from home and to begin developing leadership qualities.

Conservation Camp was held for senior 4-H'ers in July for those who are interested in conservation and who exhibit leadership qualities. Frances Burchett attended from Chesterfield.

Short Course was held in June at V.P.I. There were 3 boys and 4 girls attending from Chesterfield, in addition to 1 agent and 1 leader. Short Course is an opportunity to recognize older 4-H members who have done a good job and to offer further training to these members.

Fairs

Fairs offer opportunities for 4-H members and clubs to show others what they have done, thereby publicizing 4-H work to the public and gaining recognition for work well done.

At Chesterfield County Fair there were 8 4-H Club booth exhibits:

- Midlothian - Bake a Better Biscuit - Blue
- McGuire - Learning for Life Through 4-H - Blue
- Marcoas - Is the Table Set Correctly? - Blue
- Beach - Plan for Living - Red
- Hickory Road Boys - Attracting Birds - Red
- Woodstock Girls - Make a Touchdown at Your Own Party-Plan Ahead - Red
- Woodstock Boys - Opportunities in 4-H - Red
- Tomahawk - Outdoor Cooking - Red

In addition, there were individual exhibits in the fair by 4-H members.

Southside Virginia Fair - Chesterfield 4-H'ers participated with both individual exhibits and one club exhibit. The Midlothian 4-H Club put up an exhibit on "Baking a Better Biscuit" and won a blue ribbon.

Not all agricultural projects lend themselves to demonstration contests. When adaptable club contests are held each year at the end of the project year to encourage the member to talk and work before a group, to master a phase of the project work, and to develop the ability to judge their own work and the work of others.

George Robertson represented the county in the Tractor Operators Contest.

Club speaking contests were held at the regular club meetings during February. All youngsters receiving blue awards were eligible to enter the County Contest. About 35 4-H'ers participated in the speaking at the club level.

The County Public Speaking Contest was held during April with 11 4-H'ers participating.

The public speaking contests were sponsored by the Honor Club to encourage the development of the ability to speak before a group and to let others know about 4-H through the speakers.

The Chesterfield County 4-H Honor Club took part in a Citizenship Tour and Week-end Conference at the National 4-H Center and the Nations Capitol on May 14 and 15. The group attending was made up of 9 Honor Club members, 3 adult leaders, 3 agents, and an agent trainee. The Conference included tours of value and interest in the Washington, D. C. area, group discussion at the 4-H Center with a similar group from New Jersey, led by Mr. Joe McAlliffe of the Federal Extension Service, and recreation with the New Jersey group.

Camps

Senior Camp was held June 20-25 with 4 girls, 2 boys and 1 agent attending from the county. Senior camp is an excellent opportunity to develop junior leaders, particularly for use in junior camp.

Junior Camp was held August 8-13. There were 35 girls attending, 6 boys attending, and 7 junior leaders. The girls who were junior leaders had all served in that capacity in 1959, so were able to carry out their duties well. The camp program included

The main club projects were the Farm and Home Electric, the Beautification of Home Grounds, Forestry, Wildlife, and Tractor Care and Safety. Other individual projects included Poultry, Vegetable Gardening, Junior Leadership, Dairying, Sheep, and Swine. These project selections were based on the needs and desires of the club members in so far as was practical. This was reasonably successful because of the 80 boys enrolled 73 completed one or more projects. Some skills were acquired in completing 112 projects of the 122 enrolled.

Activities

Each club is encouraged to have at least one community activity each year. This year each 4-H club in the county assisted with an anti-litter program. They set as a goal to place 500 4-H litter bags in Chesterfield automobiles. Actually 600 were sold. This project had a secondary purpose. A portion of the income stayed in the club treasury and a portion was to be donated to 4-H Camp Farrar. Other activities have included cleaning church grounds, putting up "4-H Welcome" signs, parent dinners, and cooperation with the County Fair.

National 4-H Club Week observance in Chesterfield included:

1. The beginning of the litter bag project with all clubs participating.
2. Talks before civic groups by older 4-H members.
3. Posters on 4-H Club Week being displayed by all clubs.
4. Observance of 4-H Sunday by several clubs. Some clubs attended in a group, others participated in the service. Several ministers used 4-H material in sermons.
5. Two exhibits about 4-H work, one in a store window, one in a school display case.
6. One parent dinner, prepared by committee served by junior leaders.

These activities increase the public knowledge of 4-H, increase the interest of 4-H members through participation and increase the interest of parents of 4-H members.

The Honor Club is made up of the outstanding older 4-H club members in the county. It meets six times during the year. Half of the meetings are devoted to educational programs and the other half to recreational and fellowship. Their objectives are: to recognize those who have done outstanding 4-H club work for 3 or more years, to encourage continued activity, to provide special training in leadership, and to provide members an opportunity to render greater services to the County 4-H Club Program.

These objectives were met through recognition of eligible members at the 4-H Achievement Program, sponsoring the Public Speaking Contest and 4-H Club Yearbook, and presenting an award to the most outstanding 4-H club member in the county. The award was earned by Frances Burtschett in 1960. The club also participated in a citizenship tour and week-and short courses at the National 4-H Center and the nation's capital.

The project planning committee was made up of the 4-H leaders and a representative from each club. This group met in August to select the project to be offered for the coming year. They also suggested the possible topics to be covered leaving some selection to the individual clubs. There were 12 leaders and 8 4-H'ers at this meeting. In future years this committee needs to meet earlier to enable the agents to get project training and order supplies for fall 4-H meetings.

The 4-H Leaders Organization is made up of all adult 4-H leaders in the county and meets quarterly to discuss problems and activities and to evaluate the 4-H Club program. Through this group the leaders get to know each other better, share interests, ideas and problems. Seven new leaders in 1959-1960 have been secured with the help of the present 4-H leaders.

There were 92 carrying agricultural projects. Each club meeting had a business session presided over by a club member.

Project Work

All 4-H Clubs selected their project for the year, at their first meeting, from those presented by the agent or leader. Usually they made a club plan of work at this same meeting by selecting topics and setting them up by months along with club activities.

Recreational opportunities have been made available this year. Three meetings have been held to teach the youth of the county folk games and square dancing. Mr. C. G. Parkinson, of Richmond, has willingly and ably assisted the groups by calling the dances. The biggest problem involved in this area has been finding places that were suitable, at a small cost. In the urban area of the county no place for any such meeting has been found. The new Fair Exhibit Building was used once after the fair and before it became too cold to use an unheated building. At this meeting 135 were in attendance and at one time 101 were participating and for most of the dances 96 were participating.

The 4-H clubs were more active in the summer of 1960 than before. Three clubs of boys met during the summer and one additional project group did project work. Rally Day was expanded to include a program of square and folk dancing. The event was held as a supper picnic, hoping that more parents could attend. This did not increase family group attendance. The total attendance was just about the same as lunch picnics.

Junior leadership opportunities were provided in the regular club programs and this year only junior leaders were used at junior camp.

There are no special interest committees. There is a need for committees on youth recreation and the automotive project. The automotive advisory committee is being organized and plans are being made to organize the recreation committee early next year.

The 4-H County Council consists of four representatives from the Chesterfield 4-H Honor Club, four junior 4-H members, selected by the Extension agents and 4-H leaders, and three 4-H leaders selected by the Leaders' Organization. The Extension agents act as advisers to the Council.

This Council meets quarterly to make the county club program for county-wide activities and evaluates them, and plans and conducts officer training in their duties and responsibilities.

YOUTH DEVELOPMENT

According to the best estimates there are at least 5,000 boys and girls of 4-H Club age in the county. The public schools do not provide training in vocational agriculture and less than half of the graduates go on to college.

The total 4-H'ers enrolled in agricultural projects in 1960 was 92. This included 80 boys enrolled in 110 projects and 12 girls enrolled in 12 projects in a total of 10 clubs.

Organization

The Extension Organization in Chesterfield is listed and explained below.

The County Extension Youth Council consists of (1) two of the Honor Club; four representatives to the 4-H County Council; (2) a representative of the County 4-H All-Star Chapter; (3) three 4-H adult leaders, one of the leader's representatives on the 4-H County Council and two additional representatives of the Leaders' Organization; and (4) representatives of the Special Interest Committees Relating to Youth.

The functions of the Council are to coordinate and correlate the work of all Extension youth work, to serve in an advisory capacity to the Extension Agents as the need arises throughout the year, and to assist in determining county-wide youth activities which should be given major emphasis during the year.

The County Youth Council meets once a year. At the meeting in the Fall of 1959 the recommendations of the group included: additional recreational opportunities, more emphasis on summer activities, encouraging clubs to meet during the summer, increasing the usefulness of Rally Day, providing a wider variety of leadership opportunities for junior leaders, and continuation of participation in annual activities such as Public Speaking, Share-the-Pun, and County Fair.

Two other problems in this area are a need for understanding of county agencies working toward a better rural life, and the need to make farms and homes safer for children and the aged.

The agent discussed these problems with farmer groups and with leaders of other rural groups like Grange and Kuritan.

To get families to understand the value of a vegetable garden in family living was selected as a goal for the year. Programs were provided for these groups. Visits and other personal contacts were made with more than 200 families, helping them with production and harvesting problems. Radio programs and news items were prepared related to gardening. It would be difficult to evaluate the effect however, 20% more farmers had soil tested this year than last year for gardens. Also, there was a slight increase on those requesting the vegetable garden letter.

Recreation, Safety, and Family Life

Pocahontas State Park covers 7,605 acres in the center of the county and has good roads and hiking trails, three lakes for swimming, boating, and fishing, playing fields for various sports, picnic facilities and three large group camps for use by organizations. One of the group camps is for negroes. Throughout the county the athletic fields of the public schools are available for county use. The Thomas Dale and Manchester fields have adequate lights for night activities; civic clubs, churches, 4-H Clubs and other groups have well planned programs that provide local recreation and activities.

Under private operation are swimming pools and three golf courses. The Annual County Fair at Chesterfield is an event of county-wide interest. Hunting is popular, especially deer and fox hunting. Both the Appomattox and James Rivers offer good fishing and boating. In addition there are over a hundred private ponds and lakes. Twelve new ponds were added this year.

In nearby Richmond, Petersburg, and Nopewell the Chesterfield people can get excellent entertainment of all kinds in concerts, lectures, theater production, art exhibits and sport events. Richmond is the home of the Atlantic Rural Exposition, and Petersburg, the Southside Virginia Fair. Richmond is also the home of the "Virginians" an International baseball club.

In spite of the above mentioned facilities and activities there is still a strong felt need for better recreational programs for our youth. Extension programs and activities related to this and safety are discussed under the Youth section of this report.

The agent worked with the Supervisors of the James River Soil Conservation District, A.S.C. County Committee, Farm Bureau, Grange, and other organizations to coordinate programs aimed at a better living for Chesterfield people.

Buildings, Surroundings, and Equipment

There have been more new homes built in Chesterfield County in the past 10 years than the total houses was in 1950. 1959 was a record year. The new home owners are faced with many problems of home grounds care and maintenance. These people have not been solicited as an area for extension work because traditionally extension here has worked with farmers and rural folk first. But more and more requests are being made for assistance with problems related to lawns, shrubs and home grounds.

Many of Chesterfield County rural homes lack attractiveness simply because the grounds are not landscaped or the farmstead plan did not give proper consideration to locating buildings relative to the dwelling. Work was done this year with members of five home demonstration clubs on home grounds planning and care.

Some part-time farmers have over mechanized with expensive equipment. They have high ambitions and too few days for using the equipment. This situation encourages the untrained youngsters to try to operate the equipment, endangering themselves, others, and the equipment.

In an effort toward more efficient use of machinery, a 4-H leader attended the Tractor Clinic and arranged to give training to 4-H members enrolled in the tractor projects.

Foods and Nutrition

There are still a great many families in the county whose income is not adequate to provide proper food after paying for the "accepted essentials" for a good life.

Farm Management

The number of farm operators are decreasing yet the gross agricultural production is almost as high as five years ago. The prices of farm products have been low and the costs of most items of production the farmer had to buy were up resulting in considerably less net income for the farmers. Some have sold land for housing while others have given up farming entirely.

The 1959 Census of Agriculture shows the average age of all farm operators to be 54.3 while in 1954 it was 53.6 years. Almost one-fourth of the operators are 65 years of age or older.

Two goals in the area of farm management were set up. They were (1) to get farmers to understand the value of adjusting land use to adaptability of soil and family resources in increasing efficiency in the farming business, and (2) to get farmers to understand the value of balancing enterprises with available labor and capital.

The agent worked with individual farmers through farm planning and providing information on individual crop and livestock enterprises. Fifty individuals were contacted on this phase of farm management. Soil testing and fertilizer recommendations as well as variety recommendations were a part of this program.

In the entire area of farm management the agent worked with about 80 different farmers. Most of them were in selecting recommended varieties, fertilizing, and pest control.

Two area poultry schools were held, a dairy clinic, an area livestock and agronomy school, a plant disease clinic and related subjects were used on radio and in newspaper weekly column.

on grounds planning for the Paul Sanders Grange. Two pruning demonstrations were given home owners. Landscape Notes were sent each month to 41 persons requesting that they be on our mailing list for them.

The Grange, the Chester Horticultural Club and the Extension Service sponsored two plant pest clinics in the county. The attendance was not as good as hoped for but those who attended were very much interested and asked many questions. Also as a result of these clinics the agent was asked to provide educational programs on pest control on ornamentals for a farmers club and the Virginia Chrysanthemum Society and had many additional phone calls.

The agent has worked with two church groups in doing grounds improvement. And assisted in seeding two athletic fields and one golf course.

With the increase of population and new homes the agent continues to get more requests for information and assistance on home grounds care and maintenance problems. It is hoped that in the future a school or series of workshops can be set up to train more people of the urban fringe in this field of home surroundings and community improvement. It is planned to add a committee to the Extension organization to give guidance to this phase of the work.

FAMILY LIVING

Chesterfield County is a desirable place to live and rear a family. It is near the medical, financial, civic, business and other facilities of Richmond, Colonial Heights, Petersburg, and Hopewell; in addition to those provided in the county. Even with a population of over 71,000 there are no incorporated towns. Large areas of the county have hourly bus transportation into the nearby cities. Almost every community has delivery of milk and bread and the delivery services of the department stores in nearby cities. No resident lives more than 30 miles from three television stations and 12 radio stations and four daily newspapers. Every magisterial district in the county has at least one well equipped volunteer fire department and three rescue squads serve the needs of the people.

Five farmers attended the Hampshire type Conference to see demonstrations and practice swine judging.

Marketing educational work was done with feeder calf producers through individual contacts and through the feeder calf organizations in Petersburg and Richmond.

Farmers were assisted with livestock production problems related to selection, feeding, care, and preparation for market. There is still room for expansion of quality livestock in Chesterfield County.

Horticulture

With Chesterfield located near the urban areas and so many people owning a few acres in the country, vegetable gardening, in the spring, is very popular. The annual sales from vegetables is about \$21,000, and horticultural specialties (nursery, flowers, etc.) about \$457,000. Both have increased in the past five years.

In assisting families to have better gardens monthly letters, prepared by the specialists at V.P.I., were sent to 67 home owners who requested to be on our mailing list. In addition, there were 187 contacts made through telephone, office visits and home visits related to gardening. Programs were planned and presented on home vegetable gardening to both the Elkhardt and the Beulah Farmers Clubs. Soil samples were analyzed and recommendations made for 31 home gardens.

Another goal was to increase appreciation, understanding and use of recommended practices in care and maintenance of home grounds.

Five home demonstration clubs elected to do work in home grounds care, planning, and maintenance. Eight demonstrations were given and two training meetings were held. The agent also provided programs of an educational nature for four garden clubs related to planning the home grounds and two on maintenance of home grounds. A program was provided for a F.T.A. on planning the home grounds for ease of maintenance. Two 4-H clubs carried projects on Beautification of Home Grounds. They toured a florist and learned some of the things involved in making a corsage. The agent also provided a demonstration

One new herd was started in D.E.I.A. work this year. Work was continued on mastitis control and prevention. And in co-operation with the Richmond Agricultural Grange, the Richmond Chamber of Commerce, the Virginia Department of Agriculture and the Agents of nearby counties, an area Dairy Clinic was held with well over a hundred dairymen attending. It was held at McKesson's "Cow Palace." It is anticipated that this will be an annual event.

The beef numbers have dropped to about 3800 reversing a trend of more cattle with fewer of them dairy animals. This began about 1943 and reached a peak in 1958.

Poultry numbers have changed very little in the past ten years. However, the egg production has increased by 28 percent. Only about 10 percent of the egg producing flock are producing hatching eggs.

Broiler production is only about half that of five years ago.

Work was done with committees of the Richmond area toward improving egg marketing and quality control. There is more to be done here but these meetings and child planning has set the pattern of what can be done. This work will continue during the coming year.

Sheep reached a low in 1945-46 but since then they have been increasing in numbers until now there are almost 700. The number is about 150 more than in 1934, yet last season farmers sold more than twice as much wool.

Hogs on farms at the time of the 1959 census (October) were 3786 as compared to 4486 in 1954. The hogs sold in 1959 were 5235 as compared to 3915 in 1954. So the total for 1959 is 1622 more. The production in 1960 is about the same or slightly more than 1959.

The agent worked with farmers and two cooperatives to assist in marketing feeder pigs. The Richmond Feeder Pig Producers Association held 6 sales and the Petersburg Feeder Pig Producers Association held 4 sales. These sales averaged setting the farmers from 50¢ to \$2.00 per pig above regular sales.

Also the improved pasture was 3,469 acres in 1959 as compared to 346 in 1954.

During 1960 there were a little more than 450 acres of new permanent pasture seeded on 44 different farms. This was an increase of about 110 acres over the 1959 seeding. About 125 acres of rotational pasture on 13 farms was also seeded this year. This makes a total of more than 575 acres of improved pasture seeded this year. In addition to the new seeding, 247 acres of permanent pasture was given fertiliser top dressing on 22 farms. There were approximately 900 tons of lime used on almost 600 acres of forage crops. This was an average of about 1½ tons per acre where as in 1959 it was almost two tons per acre. For the farmers that we are reaching this shows improvement. It is felt that there are still too many acres that need two tons or more. It is estimated that Chesterfield agriculture could benefit by annual applications of ten times the 1960 lime usage.

Another improvement in soil treatment and land management was the increase in winter cover crops, this is up about 300 acres over last year. In prior years planting of cover crops have been used primarily by tobacco farmers and dairymen. Other farmers are increasing this practice. They have been able to get some grazing from these crops.

Again this year the greatest needs in Agronomy are to increase the acreage being limed, increase alfalfa acreage and improve the soybean yields. The soybean acreage has more than doubled in the past five years and the yields have increased about five bushels per acre. The yield should be twice what it is now.

Animal Husbandry

The number of all cattle was 3,076 as reported by the 1959 census of Agriculture. This is about 300 less than 5 years ago. About 50 of these were dairy cattle. One dairy herd was dispersed this year leaving 12 grade-A dairys. There are now only about 1400 dairy cows in the county.

AGRICULTURAL PRODUCTION AND MARKETING

The gross agricultural production is about \$2.25 million. The value of land and buildings is \$13,966,066.00 or \$238.96 per acre.

Agronomy

The corn acreage has been on a decline for more than twenty years. The rate of decline has slowed. There are now 3171 acres in corn. The acreage harvested for grain in 1959 was 2067, which is about one-eighth less than that harvested in 1954. However, the bushels harvested in 1959 were 78,286 as compared to 52,700 in 1954. The crop for 1960 is about 80% harvested but from checking representative farms it is estimated that the acreage is about the same as last year and the yields between 40 and 45 bushels per acre. This is slightly above the past three year average and more than 200% of the past ten-year average. Many farmers this year have averaged above 75 bushels. This was possible by using adapted hybrid varieties, good cultural practices, weed control and harvesting with proper equipment at the right time. The soils of Chesterfield County, generally, are not well adapted to high corn yields.

The goal of at least one and one half tons of hay for each hay consuming animal unit (3600) in the county (8400 tons) was not reached this year. However, there were almost 7,000 tons produced. Hay production was reduced primarily because of unfavorable hay making weather in the spring and early summer. And for several years now the alfalfa weevil has been very destructive. The alfalfa acreage was up to about 700 acres in 1950 and down to 450 in 1959. This fall farmers seeded about 100 acres as compared to 16 acres last year. This increase was encouraged by chemical control of the weevil and certain weeds.

Chesterfield has approximately 5,600 forage eating animals on the farms. The agronomy committee felt that there was a need for at least 1,000 acres of new pasture this year. This was based on the information that there were about 13,000 acres in pasture and of these, 4300 acres were woodland pasture. The woodland pasture has been cut in half in the past five years.

EXTENSION PROGRAM

The long time Extension Program of (1) Fitting Production to Market Demands; (2) Increasing Efficiency in all phases of Agriculture and County Life Activities; (3) Improving Methods of Marketing; and (4) Improving Living Standards has continued.

Keeping in mind the objectives selected for our long time Extension Program, the following problem areas were selected as being most important to emphasize throughout the 1960 Extension year.

- I Agricultural Production and Marketing
- II Family Living
- III Youth Development
- IV Conservation, Development and Use of Natural Resources
- V Community Improvement and Public Affairs

These problem areas were divided by committees into specific problems and goals. Methods and teaching devices were selected and a calendar of activities, along with cooperating agencies or individuals, were set up as a plan of work for 1960.

The 1950 census states that 75.1% of county families owned their own homes. A recent check with the office of the county treasurer shows that this percentage holds. As the county population increases, more homes are built and bought. According to the 1950 census, the median size of dwellings was 4.8 rooms. According to a check with the building inspector, the average size of homes built since 1950 has been 6 rooms. The implication would be that the mortgage, taxes, upkeep and repairs would be more expensive on these larger homes. The fact that many homes are being built, mostly in subdivided areas, where land is cleared by contractors, means that people buying these homes need assistance in planning and planting their home grounds.

In the past year there has been a definite trend toward the construction of multiple housing units for rental purposes.

The accident rate, particularly motor vehicle, is high. This is due to the number of heavily traveled highways in the county; U.S. 301, 1, 60, 360 and 95.

Recreational facilities, especially in the rapidly growing urban areas, are lacking. Chesterfield does not have a recreation department. There is a great need for securing park and other recreational sites before they are consumed. Focahontas Park in the center of the county offers good roads and hiking trails, lakes, and playing fields, but for many people who live a distance from the park it is not accessible because of no public transportation. Richmond and Petersburg offer opportunities for entertainment of all kinds: concerts, lectures, museums, art exhibits, sports events. They may not be possible for many because of the expense.

Many families have bought a few acres out in the country.

They commute to one of the nearby cities to work. They have assumed heavy obligations that prevent many improvements, too, they are limited on time available to devote to it since they must hold down a full time job either in industry or business.

The Richmond area, of which Chesterfield is a part, ranks with the three top metropolitan areas of the South in proportional industrialization. The most important industries located in the area are: tobacco, leather goods, clay, concrete and glass products, chemicals, and power.

At the present there are 43 manufacturing establishments in the county; an industrial survey completed by the Virginia Electric and Power Company in 1937 showed 42 large industrial sites, many of which are located on the James River.

Deep water frontage along the James and Appomattox rivers provides good shipping facilities by vessel through Norfolk. Good highways, (Routes 1, 60, 95, 360) and railways: The Southern, Seaboard, and Atlantic Coast Line, cross the county and offer additional excellent transportation facilities. Chesterfield, according to the Regional Planning Commission, seems to have the largest industrial potential of the counties in the area because of its large waterfront and many highways and railroads which pass through the county, making industrial land accessible.

The majority of the labor force is employed in industry. The average production worker in manufacturing plants in the Richmond Metropolitan Area (Richmond, Chesterfield and Henrico) worked 40.1 hours in September. He received an average hourly earning of \$2.02 and weekly earning of \$81.00 as compared to \$80.34 in 1939 and \$74.56 in 1938. Wages have risen steadily in the area and the trend is toward higher wages. Hourly pay in the area was seven cents more than in a corresponding period in 1939.

There are approximately 20,000 dwelling units in the county. More than half of these have been built since 1950. In 1959 there were more than 1300 built and the 1960 permits were 961. There was an increase in remodeling, repairing or additions to residential buildings this year.

The trend is toward a decreasing percentage in the rural and rural-non-farm population compared to an increasing percentage of urban population. The boom in industrial development has contributed greatly to the heterogeneity of the population, people have come from all parts of the United States.

Twenty-three and eight-tenths percent of the 297,000 acres total land is in 533 farms averaging 131.1 acres per farm. This has changed from 913 farms in 1954 averaging 86.4 acres, 1422 in 1950 averaging 71.7 acres and 2255 farms averaging 51.1 acres in 1945. The trend has been toward fewer and larger farms. In 1945 the proportion of land in farms was 38.8 percent. In 1955 it was 26.4 percent and this year 23.8 percent.

There have been changes in farm values. The value of land and buildings averaged \$10,647 per farm in 1954. The latest census (October 1959) showed the average value per farm to be \$29,952 and \$258,96 per acre. This is an increase from \$149.74 average in 1954.

The latest census shows 533 farms of which 400 are white operators. Of all farm operators only 5.8 percent are tenants. This is a decrease from 7 percent in 1954 and 13.3 percent in 1945.

Agriculture in the county is most diversified due to climatic conditions, varied soil types, and geographic location at the breaking point of the Coastal plain and the Piedmont, and having ready markets nearby for a wide variety of agricultural commodities. Another factor in this diversification is the heterogeneity of the people; they come from all over the country and have brought with them many social and agricultural ideas.

With almost 42 percent less farms the gross agricultural production in 1959 was only about 10 percent less than the \$2.5 million in 1954.

Chesterfield County has many things that make it a desirable place to live. The climate is healthful and suited to agriculture. Both winters and summers are mild and extreme heat and cold are seldom experienced. The altitude runs from sea level to 360 feet, generally from 150 to 200 feet. Average precipitation is about 42 inches. Average temperature is above 39° in January and 80° in July. The growing season averages 217 days.

COUNTY SITUATION

Chesterfield County, named for Philip Stanhope, Fourth Earl of Chesterfield, was formed in 1749 but had been settled much earlier for the villages of Henrico and Bermuda Hundred were established in 1611 and 1613. Bermuda Hundred is the oldest continuously occupied white settlement in America. Action of the American Revolution involving Lafayette and Benedict Arnold occurred here, and in 1864 and 1865 the area was important in sieges of Richmond and Petersburg.

Chesterfield County, with a land area of 465 square miles (297,000 acres), and a water area of 9 square miles, lies in East Central Virginia, between the Appomattox and the James Rivers, just where the Tidewater Plain meets the Piedmont Plateau. It is bounded on the north by the city of Richmond and the county of Henrico; on the east by the counties of Charles City and Prince George and the city of Hopewell; on the south by the cities of Colonial Heights and Petersburg and the county of Dinwiddie; on the southwest by Amelia county, and on the northwest by Powhatan County.

According to the Richmond Regional Planning Commission (report 1, 1958), "Chesterfield County has the fastest percentage rate of growth at the present time. Although it is in the process of leveling off, the county will nonetheless continue to grow . . . of the increase from 1958 to 1980, Chesterfield is expected to get 26%, Henrico 53%, and Richmond 21%." The Commission estimates that by 1970 the population of the county will have increased to 92,000 and by 1980 will reach 112,000. The preliminary report of the 1960 census gave the county population now as 71,009.

In the past ten years, many subdivisions have sprung up throughout the county, but they are in scattered areas. The greatest concentration occurs in the Manchester and Midlothian Districts. This urban expansion has created a greater need for all kinds of facilities: parks, streets, sewers, water, etc.

A large portion of the population is the rural-urban fringe of the metropolitan areas of Richmond, Hopewell, Colonial Heights, and Petersburg. There are no incorporated towns within the county.

INDEX

	Page
COUNTY SITUATION	1
EXTENSION PROGRAM	5
AGRICULTURAL PRODUCTION AND MARKETING	6
Artenomy	6
Animal Husbandry	7
Horticulture	9
FAMILY LIVING	10
Farm Management	11
Buildings, Surroundings, and Equipment	12
Foods and Nutrition	12
Recreation, Safety and Family Life	13
YOUTH DEVELOPMENT	15
Organization	15
Project Work	17
Activities	18
Camps	19
Fairs	20
Summary	21
CONSERVATION, DEVELOPMENT AND USE OF NATURAL RESOURCES	22
COMMUNITY IMPROVEMENT AND PUBLIC AFFAIRS	25
Producer-Consumer Relations	25
EVALUATION AND SUMMARY	26

ANNUAL NARRATIVE REPORT

COUNTY EXTENSION WORK

Virginia Agricultural Extension Service

MARSHALL JONES

Name

COUNTY AGRICULTURAL Agent

Title

Assistant Agent

Assistant Agent

Assistant Agent



1960

CHESTERFIELD
County