

O. K. Jan. 1, 1948.  
O. F. McCarty

NARRATIVE REPORT

FOR

1947

DAVIDSON COUNTY

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Lexington, N. C.

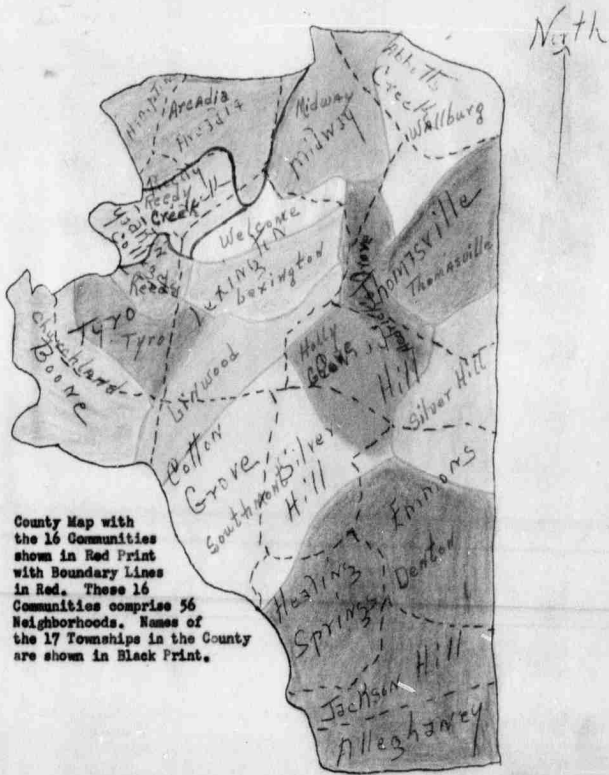
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# DAVIDSON COUNTY



County Map with the 16 Communities shown in Red Print with Boundary Lines in Red. These 16 Communities comprise 56 Neighborhoods. Names of the 17 Townships in the County are shown in Black Print.

## ACKNOWLEDGMENT

Full credit and acknowledgment is hereby given, first, to the farmers of Davidson County, particularly the Neighborhood leaders, whose splendid cooperation and assistance made it possible for us to accomplish the results that have been obtained this year, and second, credit and appreciation is given to the Agricultural Extension Specialists, other Agricultural Agencies, County Board of Commissioners, local Chamber of Commerce and others who have rendered valuable assistance in furthering the Agricultural Extension Program in Davidson County in 1947.

## ORGANIZATION

At least fifteen different organizations or organized groups aided in furthering the Agricultural Extension Program in the County during 1947. Such non-agricultural organizations as civic clubs and the Lexington Chamber of Commerce were particularly helpful this year. The Agricultural committee of the Chamber of Commerce has rendered valuable assistance in a long time plan of work for the Agriculture of the County.

The following is a list of the principal cooperating organizations:

1. Davidson County Board of Agriculture
2. Davidson County Board of Commissioners
3. County Neighborhood Leaders
4. Davidson Farmers Mutual Exchange, Inc.
5. Davidson Breeders Cooperative
6. Davidson County Agricultural Conservation Association
7. Civic Clubs
8. Davidson County Agricultural Workers Council
9. Pomona Grange
10. Chamber of Commerce
11. Davidson Mutual Electric Corporation
12. Local Newspapers

13. Radio Stations
14. Middle Yadkin Soil Conservation District
15. County Board of Education

The County Board of Commissioners appropriated \$9,650.00 as the County's part of funds necessary for conducting Extension work in the County. This is approximately the same amount appropriated in 1946. An increase in the Budget was requested but due to the tax situation in the County the Commissioners did not deem it possible to grant the request as a whole or in part.

The Extension year was begun on December 1, 1946 with a staff of four men, namely, J. F. Brown, County Agent, Paul S. Keyes, Assistant County Agent, John M. Watts, Jr., Assistant County Agent and W. R. Crook, Assistant County Agent. The last two men began work in the County the latter part of 1946. Paul S. Keyes has worked principally on the livestock program while W. R. Crook worked mainly on the horticulture program, principally sweet potatoes. The 4-H club program has been under the supervision of John M. Watts, Jr. All Assistant County Agents have spent a portion of their time on the overall Extension program.

Paul S. Keyes resigned October 1, 1947 to become Farm Manager of the Baptist Orphanage of N. C. with headquarters at Thomasville, N. C. The Board of Agriculture recommended E. S. Stokes as successor to Mr. Keyes. He was approved by the County Commissioners and began work in the County December 1, 1947. Mr. Stokes comes back to Davidson County where he was born and reared on a farm, highly recommended and well qualified. He will work principally with the livestock program. Mr. Stokes graduated from N. C. State College in 1942 and for the past five years has been with the Extension Service in Stokes County.

#### PROGRAM OF WORK

The 1947 Program of Work was outlined following suggestions and advice of the County Board of Agriculture, composed of 45 members representing all sections of the County together with assistance from the District Agent and Extension

Service Specialists. The Neighborhood Leader Organization assisted in carrying out the program in every community.

The program has been carried out by means of result demonstrations, meetings, news articles, radio programs and circular letters.

During the year Extension Agents conducted a weekly radio program over the Lexington Station and a regular weekly Farm News Column in the Lexington, Thomasville, and Denton newspapers.

Community and Neighborhood Leaders rendered valuable assistance this year on the following phases of work:

1. County-wide Corn Production Program to increase corn yields by means of improved practices.
2. County-wide Feed Production Program
  - (a) Increasing Alfalfa Acreage
  - (b) Increasing Ladino Clover Acreage
  - (c) Increasing Permanent Pasture Acreage and Improving Existing Pastures by Use of Lime, Phosphate and Reseeding
  - (d) Promoting Use of More Lime and Phosphate
3. Organizing Breeders Cooperative for the Artificial Breeding of Dairy Cattle.
4. Promoting Improved Practices Among Sweet Potato Growers.
5. Assistance On Marketing Problems.
6. 4-H Club Organization and Project Activities.
7. Red Cross and Boy Scout Drives in Rural Areas.

4-H Club Work has been a main part of our program of work this year. We have been able to strengthen and improve this phase of Extension Work considerably as borne out by results obtained.

## COUNTY PROGRAM OF WORK FOR 1947

(ADULT RESULT AND 4-H CLUB DEMONSTRATIONS OUTLINED)

Kind	Result Demonstrations Planned		Result Demonstrations Started		Result Demonstrations Completed or Carried Into Next Year	
	Adult	4-H	Adult	4-H	Adult	4-H
Corn	20	70	25	68	18	58
Small Grain	3	4	1	2	1	1
Perm. Pasture	4		15		15	
Temp. Grazing		2	2		2	2
Tobacco	4	26	3	26	3	12
Sweet Potatoes	10	10	10	10	1	6
Irish Potatoes		4		2		1
Home Gardens		12		10		10
Poultry	7	35	6	25	6	20
Forestry	1	4	1	0	1	0
Farm Management	20		20		20	
Dairy Cattle	3	30	4	30	4	25
Swine		31		29		16
Beef Cattle		20		20		20
Agricultural Eng.	11	1	12	1	9	1
Farm Records	20		20		20	
Marketing, Buying and Selling, Financing	1		1		1	
Alfalfa	4		15		15	
Entomology	2		2		2	



## AGRICULTURAL ENGINEERING

In January a special County-wide Farm Construction meeting was held. A definite program was prepared well in advance and included D. S. Weaver, Head Department of Agricultural Engineering and J. A. Arey, Extension Dairyman, both of State College and representatives of the Portland Cement Association, together with brick, tile and concrete block manufacturers. Construction of dairy barns and silos came up for the main part of the discussion along with the proper mixing and casting of concrete on the farm. Several other types of construction on the farm were discussed. The meeting was attended by around 60 farmers many of whom were planning to build Grade A Milking Barns and erect Silos. Two movies, in color, were shown illustrating the proper mixing and placing of concrete and building with concrete blocks.

Thirty-five different farmers have been assisted with plans for dairy barns. Twenty other farmers were helped to construct silos. Extension Agents assisted J. O. Peck of the Reeds community and L. G. Davis of the Churchland community in planning a complete hog layout including farrowing pens and building and lots for growing out hogs for market.

Much interest has been shown this year in ditching with dynamite and Agents directly assisted eleven farmers on proper ditching and safety precautions. In September a special dynamite ditching demonstration was held on the farm of J. F. Motsinger at Wallburg and was under the supervision of H. M. Ellis, Extension Agricultural Engineer of State College. Representatives of the Soil Conservation Service also cooperated in staging the demonstration. A ditch 7 feet wide at top and 4 feet wide at bottom, 5 feet deep and 900 feet long was blown by placing two sticks of regular ditching dynamite in holes 18 inches deep and 24 inches apart. The demonstration was very successful, opening up a nice straight clean ditch that reclaimed at least ten acres of excellent bottom land that had been unfit for even pasture for 30 years.

Considerable work has been done on Grade A Milking Barns. The Extension

Service, with the assistance of the local Milk Company, outlined plans for a Model Dairy Barn completely equipped. We selected the Odell Sink family in the Pilgrim community. The barn was completed and a meeting was held at the demonstration in August with around 300 people present. The barn was a combination milk house and milking barn complete with all equipment including milking machine and cost \$1500.00 for the barn and \$700.00 for equipment. Siding, roof and ceiling of the barn was aluminum. This demonstration aided immensely in getting other farmers to build Grade A Milk Barns.

With the help of the Head of the Agricultural Engineering Department at State College, complete plans and blueprints were worked out for a large Judging Arena to be constructed near Lexington to handle the large central Piedmont Junior Dairy Show which has become an annual event here. The building is to be ready by September 1948 and will take care of 300 animals when added to existing facilities.

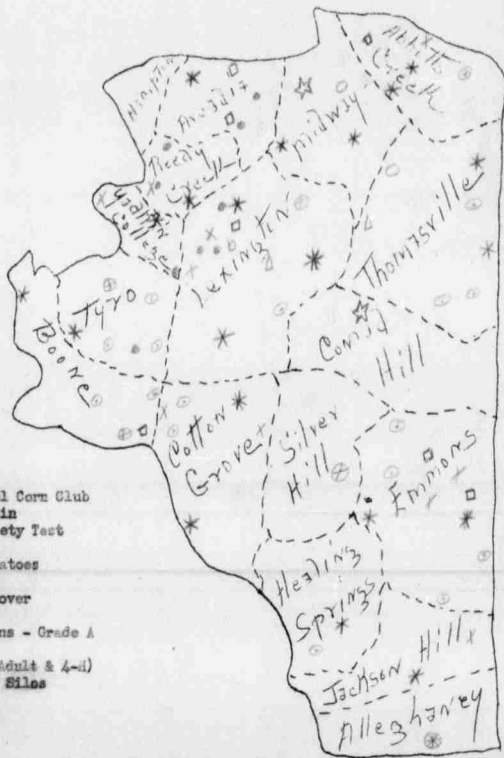
Assistance was given one Veteran in planning a complete farm building layout on his farm.

#### ENTOMOLOGY

At least 300 farmers were assisted on the proper use of DDT. One Method demonstration was given on the proper way to treat a Dairy Barn for fly control with seventy-five farmers attending.

Assistance was given 8 farmers and 26 city families in controlling Army Worms and Grubs damaging field crops and lawns.

# DAVIDSON COUNTY



- X 100 Bushel Corn Club
- Small Grain
- \* Corn Variety Test
- Tobacco
- Sweet Potatoes
- Pastures
- Ladino Clover
- ⊕ Alfalfa
- △ Dairy Barns - Grade A
- \* T. V. A.
- Poultry (Adult & 4-1)
- Temporary Silos

## CROP PRODUCTION

Corn

In 1946 numerous demonstrations were carried out on all phases of corn production; comparing fertilization rates; hybrids versus open-pollinated varieties; spacing between rows and within the rows; shallow and deep cultivation, etc. The program went over so well and our farmers seemed convinced of the profit to be realized that this year it was necessary to conduct only one major demonstration. This was conducted on the J. M. King farm, near Wallburg, and was concluded with a field meeting attended by a large number of farmers on October 22. This corn was all planted on May 15, in 43 inch rows, with a row spacing of 14 inches. All plots were fertilized as follows, except Plot No. 5 which received no Nitrate of Soda:

225 lbs. 3-9-9 at Planting  
 450 lbs. 3-9-9 Side Dressing  
 125 lbs. 16-0-0 Side Dressing

The results are as follows:

<u>Plot Number</u>	<u>Variety</u>	<u>Yield Per Acre</u>
1	Dixie 17	86.7 bu. ✓
2	N. C. 1032	51.3 bu. ✓
3	N. C. 26	73.7 bu. ✓
4	Jarvis Golden Prolific	59.5 bu.
5	Jarvis Golden Prolific	45.2 bu.

The season was extremely dry, in fact this community was about the driest of any in the County. Farmers were enthusiastic about this new Dixie 17, grown for the first time in the County this year in this test.

Farmers were advised to plant recommended hybrids only. We believe that the hybrid corn acreage increased for the year from 8% in 1946 to 18-20% this year.

A meeting was held on February 14 with Dr. R. P. Moore, Director of the North Carolina Crop Improvement Association, in charge, in regard to the future of hybrid seed corn production in Davidson County. We did not want our demand for hybrid seed to grow faster than the supply. As a result, three new Apprentice Growers were approved for the County; they are: The FFA Chapter at Denton School with Ray Duncan in charge; E. A. Clodfelter, of Rt. 1, Lexington and M. T. Leonard, of Rt. 1, Linwood. This brings to a total of five the number of eligible commercial producers of hybrid corn for 1948. All have N. C. 26.

Considerable time was spent in checking corn yields by the estimation method this fall. The results were gratifying for the dry and unfavorable season. Six adults made over 100 bushels per acre in 1947 as compared with two each in 1946 and 1945. All have been awarded full Membership Certificates in the newly organized 100 Bushel Corn Club. Eleven adults were awarded Associate Membership for producing between 75 and 100 bushels per acre.

The Lexington Civitan Club, upon request last Spring, agreed to give the sum of \$100 in prize money for an Adult Corn Contest. A Result meeting was held at the regular weekly dinner meeting of the Club on Tuesday night November 25 and the following farmers were presented with checks:

George Mize, \$50 for producing 134 bushels per acre  
John Spurgeon, \$25 for producing 114 bushels per acre  
Roy Arnold, \$15 for producing 107 bushels per acre  
Marshall Walser, \$5 for producing 104 bushels per acre  
Wright M. Petrea, \$5 for producing 102 bushels per acre

Dr. E. R. Collins from State College was guest speaker of the occasion.

Sweet Potatoes

Davidson County cannot boast that it now ranks third in North Carolina in sweet potato production. According to statistics Davidson County now ranks eleventh in North Carolina, this decrease largely due to shortage of labor and the lack of a market. Work with this crop was a main item of our 1947 program of work for the County. While this County ranks high in regard to acreage and production it is far behind on improved practices with reference to growing, handling, storing and marketing. Considerable time was devoted to helping farmers on improved seed, seed treatment, better cultural practices, improved methods in harvesting, grading, storing, curing and marketing potatoes.

A Method Demonstration on grading and packing potatoes was held at the farm of Mr. Odell Sink of Route 1, Lexington. Mr. Sink graded and packed enough No. 1 potatoes to supply the local stores for a week. When delivery was made the following week, all of the stores wanted only No. 1 potatoes. The increase in price in No. 1 potatoes over the commercial pack that he had been delivering was \$1.00 per bushel. This proved to be a benefit for Mr. Sink as he has a standing market for his No. 1 potatoes at a premium.

Six farmers applied for certification of potatoes through the North Carolina Crop Improvement Association. To date the final house inspection has not been made but it is hoped that all of the growers will pass certification. One hundred nineteen bushels of Certified Porto Rico sweet potato seed were purchased for farmers in the County from Louisiana. The bringing in of these good seed and the production of good seed in the County are steps toward improving the quality of potatoes.

A total of 567 farm visits were made with reference to sweet potatoes during the year. Ten Result Demonstrations were conducted during the year with farmers using all of the improved practices.

A summary of the data on the ten Result Demonstrations is given on the following page.

Name of Demonstrator	Acre-age	Fert. Analysis	Amt. per Acre	Fert. Cont. Borax	Seed Treatment	Row Width Feet	Spacing Inches	Total Yield	
								No. 1	Jumbos Culls & Strings
Cleve Leonard	0.5	3-9-9	1000	Yes	Semesan Bel	3	10-12	250	15
J. F. Byerly	1.0	3-9-9	1000	Yes	Semesan Bel	3	12	345 ✓	77
Paul Sink	.9	3-9-9	900	Yes	Semesan Bel	3	10-12	227	100
Rome Hill	.4	3-9-9	1000	Yes	Semesan Bel - Slips Borax	3	10	75	75
Jeff Fritts	1.5	3-9-9	1000	Yes	Borax	3	10	358 ✓	25
Clarence Mock	1.5	3-9-9	1000-1200	Yes	Semesan Bel	3	10	515 ✓	25
E. E. Mock	2.5	3-9-9	1000	Yes	Semesan Bel	3	10-12	629 ✓	40
Odell Sink	1.0	3-9-9	1000	Yes	Semesan Bel - Slips Borax	3	10	250 ✓	80
S. W. Leonard	.7	3-9-9	600	Yes	Semesan Bel	3	10-12	123	58
C. O. Pickle	2.0	3-9-9	1000	Yes	Semesan Bel	3	10	Not Harvested Due to Weather Conditions	

Tobacco

Tobacco is the leading source of income in Davidson County by a closer margin than ever before. Dairying will undoubtedly replace it at the top in the near future. The estimated income for this year's crop is approximately \$1,800,000.00.

## I. Weed Control Plant Bed Result Demonstrations

Five demonstrations were started in October 1946 and completed in May of this year. These demonstrations were set up in cooperation with Mr. R. R. Bennett, the State Extension Tobacco Specialist. Both Uramon and Cyanamid were used separately and a combination of the two used together and all compared to a check or untreated plot. Satisfactory results were obtained in most cases with all three treatments except that only partial control was credited to the Cyanamid where used alone. Mr. Bennett, who observed these, May 2nd, stated that our results checked very closely with all those that he had seen; namely, perhaps 1 1/2 lbs. of Cyanamid per square yard of bed should be used to insure control and that the combined treatment of Cyanamid and Uramon gave the best results.

Two field meetings were held on May 8 to observe the results. Many expressed plans to try the chemicals this year.

Two similar demonstrations were planned for this year but due to the persistent rainy season in October and early November only one was started. It is on the Wilson Hedgecock farm, near Wallburg.

## II. Blue Mold

Generally speaking, the Blue Mold situation did not develop seriously in the County this year. We consider this very fortunate because as badly as farmers wanted Fermate and remembering the results they had obtained from it the previous season, only a limited quantity was to be had. Much assistance was given as to proper and economical methods of using the limited supply of Fermate which was available.



## III. Black Shank

Attacks from this disease were worse and more widespread this year than reportedly ever observed before. Many thousands of dollars were lost as direct result. A visit was made to the T. M. Lewis farm in Forsyth County, by several of our farmers and two of our Agents, to see the Oxford Strains 1, 2, and 3 all growing in the field; also the Vestas, etc. We were discussing the practicability of taking numerous farmers to this farm to see and satisfy themselves about the resistance and quality of the Oxford Strains when it was reported that we had a demonstration - just what the Doctor ordered - right in our own yard. This report proved true. Mr. John W. Spoolman of Rt. 5, Winston-Salem, N. C. suffered quite a loss in 1946 from Black Shank, and he had secured an ounce of Oxford #1 and planted half his crop in Oxford #1 and the other half in his own variety, Yellow Mammoth. The Mammoth went down badly and only an occasional stalk of the Oxford #1.

A field meeting was held on the Spoolman farm and many farmers attended. They seemed well satisfied with the quality and curing ability of Oxford # 1.

## IV. Oxford Tobacco Field Day

Over 100 farmers went to Oxford on July 23 and were conducted over the grounds at the Oxford Tobacco Station. They observed variety tests, cultural methods, curers, Turkish tobacco, rotations, etc. All expressed great satisfaction for having made the trip.

Wheat, Oats and Barley

Davidson County, as one of the leading small grain producing Counties in North Carolina, harvested an excellent grain crop in 1947. The acreage seeded for next year has been greatly curtailed by the continued wet weather. We have encouraged farmers to go ahead and seed as much of their planned acreage as possible even though it will be December before this can be done. A heavy seeding rate, about seven pecks per acre, of wheat, has been recommended for fear that freezing may cause considerable damage. The seeding of oats and barley late has been discouraged.

The average yield per acre in the County continues to climb for all the grains because of better methods, improved practices, and the increased use of improved adapted varieties.

A "super" demonstration was started on the J. O. Crotts, Jr. farm, at Newsom, N. C., in September in cooperation with the Department of Agronomy at State College and the Experiment Station. Plans were outlined for the seeding of thirty-eight different plots embracing an area of approximately four acres. Wheat, oats, and barley were to be used and the plots to include comparisons on poor practices and good practices in seeding small grain, and proper preparation of seed bed, time of seeding, fertilizer rate per acre; the use of top-dressing was also to be stressed. Another series of plots was to be devoted to a comparison of fertilization practices involving the use of both complete fertilizer and nitrogen top-dressing and another on the comparison of the date of seeding. Still other plots would deal with the effect of seed treatment and a comparison of varieties on wheat, oats, and barley. ✓

We are indeed very sorry to report that due to the continued rain in October and November, we were recently informed by Mr. W. H. Rankin, Research Associate Professor of Agronomy at State College, who is in charge of this project, that it would be necessary to abandon the majority of these demonstrations. We sincerely hope that next year we will be able to follow through with a similar project. ✓

#### Cotton

Cotton is definitely a minor crop in the County with only 920 acres harvested in 1946 according to census figures. It has rapidly decreased in acreage due to the acute shortage of labor during the last few years in the County. ✓

Alfalfa

Increasing the acreage of alfalfa has been a major item in our program of work this year. Alfalfa will grow well on most soils found in Davidson County. Since the County is turning more and more to livestock, especially dairying, alfalfa offers great possibilities as a hay crop.

We began our educational program early in the year through the newspapers, circular letters and radio talks. This was followed up by a County-wide alfalfa meeting in February. The keynote of this meeting was "Let's Increase The Acreage of Alfalfa and Ladino Clover in Davidson County." The Chamber of Commerce and local business firms assisted in advertising the meeting. We found testimonials from successful alfalfa growers very effective. Over one hundred farmers attended the meeting to hear the discussion led by Dr. Roy Lovvorn, Extension Forage Crops Specialist of State College, and practically every farmer present pledged to seed some alfalfa in 1947. Dr. Lovvorn also assisted us with field meetings in June held on the farms of "Lank" Harris, of the Holly Grove community and Charlie Graham of the Linwood community, both very successful alfalfa growers.

Arrangements were made early to see that a plentiful seed supply was available. Local Dealers cooperated splendidly in ordering seed which averaged at retail price about .45¢ per pound this year. The County Agent has served this year on the Technical Advisory Committee of the AAA and early in the year we urged the AAA County Committee to include seeding alfalfa as a Soil Building Practice for 1947 and this was done. Fall seeding was stressed on land where a legume was grown this year with the seed bed prepared by disking. Farmers were urged to get soil samples and have soil tests made in advance and order lime and fertilizer early.

We approached seed bed preparation time confidently but we hadn't reckoned with the weather and a transportation bottleneck on lime. Both the months of July and August were extremely dry in most sections of the County. As a result many farmers did not get enough rain to prepare a seed bed. Many others that tried it had extreme difficulty in doing anything with hard ground covered with a legume crop. Most farmers have ordered dry bagged lime which never arrived. All through

late spring and the summer dry lime was almost non-existent on the local market. It was too late to switch to bulk lime. The weather and the lime situation seriously affected our program this year, however, in spite of this between 350 and 400 acres were seeded, bringing our total alfalfa acreage in the County to around 1400 acres.

The progress made on increasing the alfalfa acreage in Davidson County is brought out by the fact that prior to 1942 there was less than one hundred acres of alfalfa in the entire County. Most of the increase that has been made took place in 1946 and 1947 with a reasonable increase in 1945. Farmers are becoming definitely alfalfa conscious. The three largest alfalfa growers in the County had no alfalfa on their farms prior to 1942 except one and he had only three acres. These farms and their present acreage are as follows: Maegeo Farms, Rt. 5, Lexington with 130 acres; C. E. Graham, Rt. 1, Linwood, with 72 acres; and Wilfred G. Fritts, Rt. 5, Lexington, with 33 acres. As a result of our efforts on alfalfa which includes the close cooperation of other agricultural agencies, at least a small patch of alfalfa can be found in every community in the County.

This nucleus of successful growers are leaders for carrying the program to hundreds of other farmers throughout the County.

#### Pastures

Ladino clover was just what we needed to give permanent pasture development in Davidson County a "shot in the arm" so to speak. While the County has been considered for a number of years a leading agricultural County in the State we have been weak on pastures - some good ones in the County, true, but far too few. More good pasture has been a strong point - one of the main points - in our program of work.

With the coming of Ladino we went to work harder than ever on pastures. It was something new and farmers sat up and took notice. It is spectacular and captured our enthusiasm as Extension Agents and we in turn have endeavored to inject this same enthusiasm into our farmers. It captured the attention of our businessmen in such organizations as Civic Clubs and Chamber of Commerce, so we enlisted

their aid in forwarding the program. The field department of our large local milk buyer has been just as enthusiastic over Ladino as anyone, and a big help in putting it over.

Knowing that Ladino had proven itself in Experiment Station tests and on farms in this State as well as in other States, we did not hesitate in going "all out" to recommend it providing it was seeded and fertilized according to Experiment Station recommendations. We have preached it until we have been nicknamed "Ladino" and the name has almost become synonymous with dairying and pastures in the County.

A special County-wide "Ladino Clover-Alfalfa Production" meeting was held in February and over 100 farmers attended and heard Dr. Roy Lovvorn, Forage Crops Specialist, lead the discussion on the production of these crops. Practically everyone present pledged to seed some acreage this year. Business men ran ads in local papers, printing testimonials from successful farmers who had already tried this new crop. Circular letters and bulletins were distributed, and many news articles were written and radio talks given on seeding Ladino Clover with Orchard Grass for Permanent Pasture.

Demonstrations were lined up in practically every community in the County. Four meetings were held at result demonstrations in May - another one in June. Definite results have been obtained, too records of seed dealers show that this year over 6,000 pounds of Ladino Clover Seed have been bought in the County.

As near as we can tell we now have close to 4500 acres of Ladino Clover-Orchard Grass pasture in Davidson County and it has been seeded on over 600 different farms. We firmly believe that a large acreage of Ladino Clover and Alfalfa, using one for grazing and one for hay, can absolutely revolutionize the livestock industry in the County. Up until now we did not know too much about how Ladino would grow. We were strong in encouraging the seeding of Ladino last spring and over 3,000 lbs. were seeded.

Many farmers went so far as to try seeding Ladino with their small grain.

This was followed by an extremely dry spring and early summer and many fields in June appeared to be total failures. A few good rains came in late June and July and the moisture situation has been very excessive all fall. The Ladino on fields that appeared bare bounced back to life and both the farmers and agricultural workers in the County have been astounded at what we have this fall. For example, Charlie Graham, dairyman of the Linwood community, seeded 2 lbs. of Ladino and 12 lbs. of Orchard Grass on a 15 acre oat field on his farm the first of April this year. We saw this field in June accompanied by Dr. Roy Lovvorn, Extension Forage Crops Specialist, and all of us were ready to admit that Mr. Graham had made a complete failure so far as Ladino was concerned, however, he seemed to have a fair stand of Orchard Grass. We inspected this field on November 15 and it is absolutely covered with a green mat of Ladino Clover that will average from three to six inches in height. This is only one of many cases of this type observed in the County. Farmers say it is the most astounding grazing crop they have ever tried. Mr. C. E. Graham seeded 12½ acres early last spring in Ladino Clover and Orchard Grass alone. He secured a good stand in spite of the dry weather and the growth on this field improved all along. Beginning the first part of August Mr. Graham turned his milking herd of 48 cows on this field and they grazed it all day or at least part of every day up until the 15th of November. An inspection of the field at this time showed that it had not been overgrazed. We have never had a crop that would stand such intensive grazing. Farmers have been urged to watch the Potash requirements of Ladino. We recommend a minimum of 600 lbs. of at least a 0-12-12 Fertiliser per acre with a heavier application if possible. We have attempted to secure soil tests on as many fields as possible where Ladino is seeded in order that the proper amount of lime may be applied.

One seed dealer in Davidson County sold 5,123 lbs. of Ladino Clover this year.

Temporary pastures have been given a great deal of attention this year. These consist of mixtures of oats and barley with crimson clover added, some farmers prefer ryegrass in the mixture. Herbert Folta, dairyman of the Arcadia community,

told us this fall he had found temporary pasture very profitable on his farm. He seeds a mixture of oats, barley, and crimson clover and fertilizes it heavily each year.

Sweet Sudan Grass is relatively new in the County. Realizing its possibilities we began some educational work on it last year lining up a few demonstrations. This year over 4,000 pounds of Sweet Sudan Grass seed were ordered and distributed cooperatively.

Timely news articles, radio programs and circular letters were used to encourage more temporary pastures.

#### LIVESTOCK PRODUCTION

##### Dairying

Dairying was a major part of our program of work this year, Extension Agents spending a total of 169 days on it. A total of 446 farm visits were made and 49 dairy meetings were held or participated in. Many activities closely related to dairying are reported under Agricultural Engineering, Agronomy and particularly 4-H club work. One Assistant Agent worked principally ten months of the year on livestock, especially dairying. After analyzing the complete dairy situation in regard to the County, with a long time program in mind, we believe dairying offers greater potential possibilities to farmers in this County than any other agricultural enterprise and therefore should be given strong emphasis in the Extension program of work each year. We have adaptable soils for feed crops and excellent markets. A great portion of our time has been devoted to stressing the production of more feed on the farm, particularly roughage such as pasture, hay and silage, details of which are mentioned elsewhere. We have approached dairying from the angle of more efficiency and better management, producing more good feed at home to cut milk production costs, better building and equipment to capture the top dollar for milk on the market by improving grade and quality and preventing losses. For example, farmers producing milk and meeting Grade A requirements receive a premium in price of \$2.45 per cwt. over those producing Grade C or manufactured milk. On an average cow producing only 4500 lbs. of milk per year this means an

increased income of \$110.00. There is a strong market for Grade A Milk in this area available to every farmer in the County. Farmers are working up to this as evidenced by the fact that in 1940 there were only 19 Grade A Dairies in the County as compared with 85 to-day. Nineteen new Grade A Dairies have been started this year. Even so, there are many other farmers who should take advantage of this opportunity.

Efficiency in milk production also takes in the breeding of better cows. With the advent of Artificial Breeding in the State the Extension Service took the lead in helping local dairymen set up a Breeder's Cooperative. Educational work was begun in September and an organization perfected and chartered by November 1st. Work on this is continuing and as this is written the interest manifested by farmers indicates this work can be started in the County early in 1948. Eleven educational meetings were held throughout the County during November.

Assistance was rendered the Davidson-Rowan D. H. I. Association. At present five herds in the County are taking advantage of this work. They are G. E. Graham, Lexington Children's Home, Maegeo Farms, L. G. Davis, and the Baptist Orphanage.

Assistance was given 127 farmers in purchasing 94 registered and 176 high grade animals.

This year we put on a strong educational program to encourage more Silos among dairymen in the County. Since permanent type Silos are hard to get and so expensive our efforts were directed largely toward getting small dairymen to erect and fill temporary Silos. As a result of this program fifteen different farmers built and filled a total of 29 Sisalkraft Silos. In constructing these we used No. 11 gauge spot-welded fencing 4 feet wide. Most of the Silos were 10 feet in diameter and 3 rings or 12 feet high with a capacity of from 20 to 22 tons. The Silos were lined with two layers of Sisalkraft paper and usually capped over with 8 to 10 inches sawdust wet down and sown with one-half bushel of oats. The cost of these Silos was approximately \$31.00 each with the wire costing around \$15.00, and the paper the balance. This has proven very satisfactory when filled with corn or cane. Some difficulty was encountered ensiling cereal crops in this type Silo.



As a result of our experiences we would strongly recommend them for corn or cane. ✓  
The Lexington Children's Home filled 4 of these Silos supplementing their 90 ton permanent Silo. Three other farmers in the County erected permanent Silos this year.

A special temporary silo result demonstration meeting was held in May on the farm of Bynum Tysinger, near Silver Hill, and over 100 farmers attended this demonstration to observe the ensiling of barley and oats in a Sisalkraft Silo. The Silo was constructed and filled at this meeting. A small crew can build and fill two of these Silos in a short day.

Beef Cattle

The beef cattle enterprise is one of the less important items in the County from a standpoint of income. The number of animals and the dollar value is one of the lowest enterprises in the County. There are eight purebred breeders in the County and thirteen grade herds all of which use purebred sires. The herds average in number from 6 to 40.

Seven purebred bulls and eight purebred females were placed with farmers in the County during the year. There has been no big expansion in the beef cattle enterprise but there has definitely been improvements in all herds. These improvements have resulted from the addition of good purebred sires and higher bred females.

The type and size of farms in Davidson County does not as a rule lend itself to the raising of beef cattle, however, we definitely feel there is a place on a number of Davidson County farms where a considerable amount of feed is produced, for the feeding out of a few steers. With this in mind we have worked with beef cattle from this angle mainly through 4-H Club Members. Results of their work is reported under 4-H Club activities elsewhere in this report.

Swine

As reported last year, the use of good pastures to raise swine economically has been emphasized. Many of our farmers are now using Ladino Clover-Orchard Grass pastures with excellent results.

The principal effort on swine work has been made through the 4-H Program and is reported there.

An outstanding young Hampshire Boar was purchased by Lloyd Davis, Route #1, Linwood, N. C. at the Carolinas Hampshire Classic at White Farms, Salisbury, N. C. The Boar sold for \$250.00 and was bred by Bray's Island Plantation, at Yemassee, S. C. This is an exceptionally fine Boar and is by Master Maker No. 324619, out of

Bray's Island Majesty Dear IV, which are two of the best blood lines of the Hampshire Breed. Mr. Davis, already a Purebred Guernsey Cattle Breeder, is now making a fine beginning with purebred swine. ✓

#### Poultry

Much attention has been given to poultry work this year. Part of this work is reported under 4-H club activities. The outstanding 4-H Poultry Activity was the Poultry Chain. ✓

Over 200 poultrymen were directly assisted with various phases of Flock Management. Agents visited forty-four farmers and helped them cull their flocks. Among these farmers 3800 birds were examined and 650 hens removed as culls. In this work we have tried to teach the flock owners the points to watch for in culling and encourage them to go over their flocks frequently and eliminate the poorly developed pullets or low producing hens. The same visit was used to stress good overall flock management.

Twenty-six flock owners were assisted with disease trouble and where we were in doubt about accurate diagnosis, diseased birds were sent, with complete information, to the Poultry Disease Laboratory at State College. ✓

We have used timely publicity frequently to forward the program, using the Monthly Poultry Suggestions supplied by the Extension Poultry Department at State College plus locally prepared material including success stories about our own flock owners. This information was disseminated by means of circular letters, news articles, radio and the distribution of bulletins. ✓

In our poultry program efficiency has been stressed, urging the saving of high priced feed to increase profits, pointing out that this begins by getting good high production bred chicks - growing them out rapidly and properly and practicing sanitation.

Extension Agents worked closely with the Local Chamber of Commerce and directly assisted in getting the Loudon Division of Standard Brands, Inc. to locate a large egg-breaking plant at Lexington. This company is investing over \$100,000.00 in this enterprise which will have a capacity of 1,000 cases of eggs daily. ✓

## CONSERVATION OF NATURAL RESOURCES

Forestry

Three farmers were assisted in planning a complete timber management program on their farms. Three farmers were assisted in estimating their timber before selling and they received \$9,000.00 more for this timber by virtue of this. Fifteen other farmers received instruction on timber scaling and timber estimating. Three forestry meetings were held on timber scaling and general forestry management work. We were assisted in this work by the Extension Forester.

A total of 15,000 Shortleaf Pine Seedlings were ordered cooperatively by four farmers in the County this year.

Soil Management

Cooperation was given the Davidson County Production and Marketing Association in promoting the carrying out of Soil Building Practices. Records of the Association show that in 1947 approximately 3,360 farmers participated in the program which is 80% of the farmers in the County. The following amounts of materials and seed were placed with farmers in the County as Grants of Aid this year through the Production and Marketing Administration:

Limestone	3,832.0 Tons	355 farmers
18% Phosphate	27,948.0 Cwt.	933 farmers
19% Phosphate	7,625 Cwt.	219 farmers
20% Phosphate	838 Cwt.	29 farmers
0-14-7	2,288 Cwt.	82 farmers
0-12-12	809 Cwt.	17 farmers
2-12-12	483 Cwt.	31 farmers
Ladino Clover	2,200 Pounds	254 farmers
Crimson Clover	13,333 Pounds	231 farmers
Ryegrass	20,938 Pounds	209 farmers

Vetch	2,627 Pounds	57 farmers
Red Top	539 Pounds	17 farmers
White Dutch Clover	58 Pounds	4 farmers
Dallis Grass	53 Pounds	8 farmers
Alfalfa	6,124 Pounds	94 farmers
Austrian Winter Peas	10,808 Pounds	86 farmers
Orchard grass	14,938 Pounds	286 farmers

In making a survey of local seed dealers in the County we find that a total amount of the following seed were sold as conservation material:

Alfalfa	10,000 Pounds ✓
Ladino Clover	6,000 Pounds ✓
Orchard Grass	28,000 Pounds
Ryegrass	35,850 Pounds
Crimson Clover	15,960 Pounds
Herds Grass	1,800 Pounds
Vetch	9,340 Pounds
A.W. Peas	15,000 Pounds ✓
Sweet Sudan	4,200 Pounds ✓

We cooperated with the Soil Conservation Service and the North Carolina Banker's Association in sponsoring the County Soil Conservation Speaking Contest. Thirteen contestants entered the County Contest and Eugene Younts of the Davis-Townsend High School was declared the County Winner. We also cooperated in getting the local Banks and the Chamber of Commerce to sponsor the District Soil Conservation Contest here at Lexington for the five Piedmont Counties in this Soil Conservation Service District and Eugene Younts of Davidson County was declared second place winner in the District Contest. ✓

Assistance was given twenty-four farmers in getting terraces surveyed and constructed on their farms. Most of the terraces are now surveyed and staked by the Davidson Work Unit of the Middle Yadkin Soil Conservation District. Assistance was given this Agency throughout the year both in an educational capacity and otherwise. ✓

Twenty farmers were assisted in working out a Conservation Plan on their farms. Very close work was given the Baptist Orphanage at Thomasville, Lexington Children's Home and the County Home in working out a satisfactory conservation plan on these farms. ✓

## FARM MANAGEMENT

T.V.A. Records

Thirteen meetings were held in December to select twenty new T.V.A. demonstrators. The farmers of each community selected the farmers in their respective community to be the demonstrator. The farmers selected were:

R. C. Surratt - Jackson Hill Community  
James S. Badgett - Jackson Hill Community  
Aron Crouse - Denton Community  
Calvin Taylor - Denton Community  
Wilson Hedgecock - Wallburg Community  
John A. Yokeley - Wallburg Community  
J. Herman Myers - Reeds Community  
J. C. Meredith - Thomasville Community  
Odell Welborn - Thomasville Community  
W. A. Talley - Arcadia Community  
C. F. Motainger - Midway Community  
Howard Thomas - Midway Community  
Odell Miller - Reedy Creek Community  
Odell Sink - Lexington Community  
Gene Buie - Churchland Community  
A. G. Yarbrough - Tyro Community  
R. D. Smith - Linwood Community  
C. C. Rush - Southmont Community  
Roy Burkhart - Hedricks Grove Community  
John Davis - Fairview Community

A complete farm plan including crop rotations was worked out on each of these twenty farms. Requisitions were submitted for thirty-nine tons of superphosphate. This material was received the first of June. Requisitions

have also been submitted for Calcium Metaphosphate for 1948.

Farm management plans were worked out with forty-six other farms in the County. These plans consist of crop rotations, labor management, live-stock, fertilization, machinery, feeding program, feed production and constructing and seeding pastures. Complete plans were worked out with the Junior Order Home, Mills Home and the County Home.

A complete survey was worked up on the farm of Mr. A. G. Yarbrough of the Tyro community as he was one of the first TVA Demonstrators in Davidson County. Mr. Yarbrough began as a TVA Demonstrator in 1939 and has followed the program very closely since that time. We found that in the past nine years Mr. Yarbrough has greatly improved the productivity of his farm as well as the production of his dairy cattle. In 1939 Mr. Yarbrough was selling butter and cream from two cows amounting to \$9.23 during the year whereas in 1947 he sold \$487.58 worth of milk. The labor earnings on this farm have increased from \$273.00 in 1939 to \$1,189.00 in 1947. Practically all of this farm has been terraced and limed since the program began. This being a small farm of 34 acres no major changes could be made from the income from this farm.

#### MARKETING AND DISTRIBUTION

The Davidson Farmers Mutual Exchange, Inc. is one of the outstanding farmer-cooperatives in the South. It is owned and operated by Davidson County farmers with five branch houses in the County. This organization now has over 3,000 members and deals in feeds, fertilizer, eggs, poultry and livestock and other farm products.

Assistance was given this cooperative in planning for future expansion along the lines of a seed cleaning outfit and a potato pecking and dehydrating plant. This cooperative has increased its capital stock from \$50,000.00 to \$500,000.00 during the year.

Assistance was given farmers in locating buyers for sweet potatoes. A number of buyers were contacted and brought into the County to help relieve the serious situation that existed from no market for these potatoes.



Assistance was given to individual farmers and one Cooperative in selling and purchasing the following:

1. Value of General Products Sold or Purchased	\$ 35,440.20 ✓
2. Value of Grain and Hay Sold or Purchased	18,442.70
3. Value of Poultry and Eggs Sold or Purchased	61,340.13
4. Value of Home Supplies Sold or Purchased	168,220.15
5. Value of Livestock Sold or Purchased	26,667.75

Total Value	\$ 310,110.93 ✓
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An egg cracking plant is under construction by Loudon's Division of Standard Brands, Inc. They plan to buy surplus eggs and break and freeze them for future use. This will also be a market to help relieve the egg market during flooded seasons. ✓

Mr. E. W. Rents, a local peach grower, found that he had a surplus of peaches and no market for them. We assisted Mr. Rents in finding a market ✓ at the local Davis Frozen Foods, Inc. of Lexington, N. C., and the Gibson Ice Cream Company, of High Point, N. C., for 20,000 pounds of Peach Puree. ✓ Mr. Rents uses a local cannery and local labor to process his peaches into the puree for ice cream.

4-H CLUB PROGRAMJoint 4-H Club Meetings

Each Club in the County meets on a regular schedule except where interruptions cannot be avoided. We have from 1½ to 2 hours for all club meetings and secure excellent cooperation from our Superintendent of Schools and all Principals in the County School system on this schedule of meetings. Normally we have a joint meeting for the first half of the allotted time at which time club officers preside, usually opening with the club pledge, at least one song, a business session, and a brief program presented by the youngsters either based on material we have mailed to the club program committee or upon their own originality. The group captain system, for announcing meetings, is used whereby we send an announcement to a designated person, who is elected at the time the other officers are elected, and this person in turn makes the necessary announcement.

4-H Demonstrations

Following the joint session, either separate demonstrations are given to the boys and girls or occasionally in cooperation with the Home Agent's office, a combined demonstration is given where the topic is of mutual interest. During the year the following demonstrations and/or programs were given to the boys:

- December - Christmas Program with exchange of gifts in most clubs and a recreation period where new games are taught, songs sung, etc.
- January - Culling the Poultry Flock (out of charts, and in some cases, live birds).
- February - Dairy Calf (Movie entitled " Carolina Cows ").
- March - Corn Production (Color Slides).
- April - Good Pastures and How To Get Them (Color Slides).
- May - Conducting Project Activities for the Summer; Keeping of Record Books, etc.
- September - Home Beautification (Aid of illustrated charts; combined meeting of boys and girls).

October - How To Save Your Eyes (aid of lamps, bulbs, and electrical supplies) Combined meeting of Boys and Girls.

November- Proper Use of Fertilizers (movie -" Putting Plant Food To Work ").

#### Achievements

An Achievement Day was held in each of the clubs and the County-wide Achievement Day was held on December 14, 1946. One hundred twenty-five boys and girls attended. Forty-six boys were awarded Bronze and Silver Pins along with Certificates for successfully completing a year's club work. County winners were recognized and awarded. Mr. Jesse James, Assistant State 4-H Club Leader, was guest speaker for the occasion.

Plans have been made for Achievement Day to be held this year on December 6, 1947. Completion of 136 projects by 115 boys this year is now assured. Bronze, Silver and Gold Pins will be awarded for first, second and third year completions. These pins were given upon request by the Lexington Kiwanis Club for the third consecutive year.

#### 4-H Camp

We shared " Camp Millstone " with Alexander County the week of August 4-9. Twenty-six boys were among those who attended from this County. All the campers expressed enthusiasm and gratification for a fine week. All campers recounted their week's activities to their respective clubs.

#### 4-H Club Week

Eleven boys attended 4-H Club Week at State College August 18-23 and reported an interesting week to their respective clubs in October. Johnnie Beck of the Denton Club presented a demonstration in Dairy Production on the topic of " How To Select A Good Dairy Calf. "

#### Special Project Activities

##### Poultry

The Poultry Chain for 4-H members which was begun in the County in 1946, sponsored by the Sears Foundation, was successfully continued. Ten new boys and

girls were selected in January and on February 25 one thousand New Hampshire Pullet Chicks were obtained from Helms U. S. R. O. P. Farm in Monroe, N. C. One Hundred chicks went to each boy or girl selected.

On September 26 an Auction Sale was held at which time twelve selected birds from each group were disposed of and the proceeds which totaled \$283.60 were placed in the County Poultry Club Fund to perpetuate the chain and bring more chicks of good breeding into the County next year. The average auction price per bird was \$2.36 and none sold for less than \$2.05 per bird.

Mr. C. F. Parrish, In Charge Poultry Extension at State College, stated that this was the closest show so far as placing the birds was concerned of any he had attended either last year or this year and all were fine birds. Only two white ribbons were given and one of these groups had eight laying birds out of the twelve presented.

Following the show and Auction a dinner was given by the Sears Foundation for the boys and girls and their parents and prizes of \$15, \$10, and \$5 were presented the winners by the Sears Foundation for blue, red and white ribbons, respectively.

New Hampshire Pullets from last year's chain which were also obtained from the Helms Farm at Monroe proved to be real layers and some excellent production records were obtained on these. Eight Broiler Project Completions were made this year but very little margin realized by the boys because of high feed costs.

#### 4-H Pig

A total of 31 swine projects were started by 27 boys and 4 girls. Sixteen completions were made.

The Pig Chain which was started in 1936 in the County has eight selected boys and girls all of whom have their gilts on feed now. The chain is made up entirely of purebred Poland Chinas and has been responsible for the spread of many good hogs throughout the County. A summary of the chain, sponsored by the Sears Foundation, through the Store located in Greensboro, N. C., is given on the following page.

Number gilts placed in chain .....	8
Number died .....	1
Number that had pigs .....	7
Number of pigs born .....	45
Number of pigs raised .....	43
Value of pigs raised @ \$15.00 each .....	\$645.00

#### 4-H Corn

Seventy boys enrolled for corn projects. Sixty-eight boys actually got their crop of one acre (or more) planted. All of these boys were actually assisted in getting their acre started correctly and a soil sample was taken for each acre. Even with a dry season and the difficulty of getting good stands or of purchasing the fertilizer called for, these boys produced on 68 acres 4,251 bushels for an average yield of 62.5 bushels.

Early last spring the Lexington Rotary Club, upon request gave us \$95.00 with which to buy hybrid seed. All of this money was used to purchase Hybrid N. C. 26 and was distributed ten pounds per boy. Enough seed corn was thus purchased to supply fifty-five boys. The remaining thirteen boys bought their own seed.

The Lexington Kiwanis Club upon request gave to the Extension Service \$125.00 in prize money for this 4-H Corn Production Contest. It will be distributed as follows: First place County prize of \$25.00 to Donald Wilson of the Churchland Club who made 129 bushels per acre; Second place County prize of \$15.00 to Johnnie Beck of the Denton Club who made 121 bushels per acre and \$5.00 each to John Reid of the Reeds Club who made 105 bushels per acre and Max Sink of the Linwood Club, who made 105 bushels per acre, to tie for third place. The remaining \$75.00 will be distributed with a \$3.50 first prize and \$1.50 second prize to go to the winners in each of the fifteen clubs in the County who participated.

A regular luncheon meeting of the Kiwanis Club for December 11, 1947 at which time the 4-H Boys who made over 100 bushels per acre will be invited in and their cash prizes presented.

About 160 corn project farm visits were made on this corn alone, but we feel that it was well justified.

#### 4-H Dairy Calf

Thirty 4-H Club Boys had dairy calf projects. Of these twenty-five were fitted and shown in the Central Piedmont Dairy Show. Assistance in fitting and showmanship was given to a grand total of forty-two purebred calves for the Central Piedmont Junior Dairy Show. Some of these were F.P.A. Calves. Davidson County winnings amounted to a total of \$250.00.

#### 4-H Beef Calves

Twenty-three baby beef calves are now on feed in Davidson County, of which fifteen belong to 4-H Club Members. All of these feeders are pointing to the Fat Stock Show and Sale to be held here in Lexington sometime during the last week in May 1948. This show is to be sponsored jointly by all agricultural agencies in the County and the Lexington Chamber of Commerce. Last year was the first time we had any baby beef projects. Five animals were fitted and shown by 4-H Club Members in the Greensboro Show and Sale on June 3 and 4, 1947. This year the number is boosted to fifteen, all of which are well bred and of good type.

#### 4-H Tobacco Projects

Twenty-six tobacco projects were started by Club members and twelve completed. Yields were drastically reduced on many of the projects because of continued dry weather in early summer.

4-H Sweet Potatoes

Ten 4-H Sweet Potato Result Demonstrations were started with the 4-H Club boys using all of the improved practices along with good seed. Seven of these boys completed their demonstrations. Jimmy Sink was the County winner in the 4-H Sweet Potato Contest sponsored by the Colonial Stores. Jimmy was also second in the State 4-H Sweet Potato Contest and was District winner in the 4-H Sweet Potato Contest.

Results of the demonstrations are as follows:

Name	Variety	Acres	Fertiliser	Yield No. 1	Strings & Culls
Jimmy Sink	Porto Rico	1	1,000	250 ✓	80
Steve Myers	Porto Rico	3/4	400	239	30
John W. Collett	Porto Rico	1	1,100	200	42
Rodney Leonard	Porto Rico	3/4	400	123	58
John Ellis Sink	Porto Rico	1/2	400	110	31
John Reid	Porto Rico	1/2	575	131	46
Bobby Lee Koontz	Porto Rico	1/8	100	20	4
Totals .....		4.625	xxx	1073	291

4-H Miscellaneous

Two Tractor Maintenance projects were completed this year by the two boys who attended the three-day Tractor Maintenance School given at Salisbury, N. C. by the American Oil Company in February. We hope to do more about this project next year. Three Home Beautification Projects were completed; one project on sheep; two on cotton; two on wheat; two on irish potatoes. Next year we hope to have completions in safety and soil conservation.

4-H In The County Fair

Two 4-H Booths were prepared by 4-H Club boys for the Davidson County Fair which was held the week of September 23-28. Premiums for 4-H exhibits were awarded in the amount of \$138.00. A Chart Display on 4-H Club Leadership in Better Corn Production was shown.

## OUTLOOK

Both income and purchasing power of Davidson County farmers hit record heights in 1947. In spite of high production costs the average prices received by farmers have kept ahead of cost of production. The efficient farmer in most instances will admit he is making money - a good return for his labor and investment. Inefficient farmers are not much better off. Farmers have seen wheat prices hit \$3.20 per bushel - higher here than was the case after World War I - wholesale Grade A milk has gone to \$6.20 per cwt. - an all-time record - eggs are now wholesaling as high as .75¢ per dozen.

Most farmers are saving money and cleaning up debts. Farmer indebtedness appears to be at a very low level. Local Banks report heavy deposits by farmers and very few requests for loans. Davidson County farmers as a whole are in the best shape they have ever been. Our farmers are more diversified and more conservative in their methods than the average North Carolina farmer. Even so, there are some farmers who are too dependent on one or two cash crops for income. The County is not a major tobacco County but around 4,800 acres were grown by about 1,400 growers this year. A few farmers are too dependent on tobacco alone for income. These farmers will feel the 28% cut in tobacco acreage.

Tobacco farmers at a recent Tobacco Outlook meeting, called by the Extension Service, failed to express any alarm or to be concerned over the 28% cut for 1948 even though this means a loss of approximately \$400,000.00 in farm income next year. Practically every farmer in the County lives at home by producing the bulk of his food and feed. The trend is away from tobacco with 300 farmers failing to plant any of their allotment this year. Cotton acreage continues to decline.

We have had some reverses late in 1947 that will have a direct effect on our farmers in 1948. An extreme wet fall has hampered seeding small grain. Not more than 15% was seeded on time and by December 15 not much more than half of the grain crop was in the ground. Yields will be low on much grain next year. Most farmers will have to seed more Spring Oats and increase corn acreage in '48 to make up for the probable short small grain crop. The wet fall dealt a heavy blow to the sweet potato crop causing thousands of bushels to become damaged by the cold weather and



excessive rains. Many farmers have potatoes they do not intend to dig. Potatoes harvested on time and of fair to good quality will bring higher prices than last year. Buyers are already bidding higher for this year's crop. Our sweet potato acreage has been decreasing and this County has dropped from third place in 1945 in North Carolina to eleventh place according to the 1946 Census.

The extremely wet fall has damaged the lespedeza seed crop and delayed harvesting. The price will be high but probably not near high enough to offset the lower production.

The outlook for dairying is bright. Dairy farmers, especially those producing Grade A milk, have prospered. More new Grade A Dairies have been started this year than ever before in a twelve month's period. The trend is definitely toward more dairying and our milch cow population continues to increase.

The feed supply situation on Davidson County farms continues to improve with an increased acreage seeded to alfalfa this year, and a heavy increase in Ladino Clover and Orchard Grass for pasture. The outlook for small grain supply is not too good for 1948 considering difficulties encountered in seeding the crop this fall. If farmers have a good season for corn and spring oats in 1948 the grain supply would be fairly good. Davidson County is still weak on good pastures and the 1948 program of work should stress increased pasture acreage and improvement of existing pastures together with continued increase in the acreage devoted to alfalfa. There is a definite need for more improvement in the quality of our dairy cattle. The formation of an Artificial Breeding Association is the most forward step that has been taken along this line but it will take from three to four years to see the improvements from this. Most of our dairymen need to improve their overall dairy management practices. There is a definite need for considerable educational work on better feeding and management along with breeding.

With Standard Brands, Inc. opening a large egg cracking plant here at Lexington our poultry marketing facilities will receive a real boost. This and other available markets offers a great challenge to farmers in the County to increase

poultry laying flocks. This coupled with an increased turn toward livestock could more than absorb the loss in income from the reduction in tobacco. There is also an opportunity for increased production in certain vegetables and small fruit crops particularly in the tobacco area with the good marketing facilities available in Winston-Salem and other nearby towns.

Davidson County is strategically located with reference to the heavily populated areas of North Carolina. With this advantage our farmers can face the future with confidence that they are advantageously located with reference to diversified markets.

#### SUMMARY OF EXTENSION ACTIVITIES AND ACCOMPLISHMENTS

1. The Davidson County Extension Service received the cooperation of at least 15 different organizations or organized groups in executing the 1946 program of work.
2. 159 Adult Result Demonstrations were conducted. At least one Result Demonstration was carried out in every community.
3. 14 4-H Clubs were reorganized. One new 4-H Club was organized at Churchland with a total membership of 34.
4. The membership in 4-H Clubs was increased 30% in 1947 over 1946. Of the boys enrolled in 1947, 161 or 60% completed 222 projects.
5. 48 meetings were held at Result Demonstrations with a total attendance of 1642 farmers.
6. 152 Instruction and Demonstration meetings were held with 4-H Club Members.
7. A total of 33 animals were shown by 4-H Club Members at the Central Piedmont Junior Dairy Show in Lexington and these members won 8 Blue, 16 Red and 9 White Ribbons at this Show.
8. 69 4-H Club Corn Projects were conducted with Hybrid Corn and with an average yield of 62.5 bushels per acre.
9. 18% of the corn crop this year was planted in Hybrid Corn. We assisted in placing 350 bushels of Hybrid Seed of adapted varieties.

10. Increased number of Hybrid corn seed growers from two to five. Held Training School for new apprentice growers.
11. Six adult farmers made over 100 bushels of corn per acre in 1947 as compared with 2 each in 1946 and 1945.
12. Secured cooperation of 3 Lexington Civic Clubs in promoting increased corn yields. A total of \$325.00 in money was donated by these Clubs for pushing Hybrid Seed for A-H club members, and for prizes for County-wide contests.
13. Conducted 10 Result Demonstrations for Sweet Potatoes. Helped farmers order cooperatively 119 bushels of Certified Porto Rican seed direct from Louisiana.
14. Six farmers grew Certified Sweet Potato Seed this year.
15. Conducted five Result Demonstrations on Tobacco Plant Bed Weed Control and held meetings at two of these demonstrations.
16. Conducted Result Demonstrations with Oxford #1 Tobacco Variety for disease resistance to Black Shank and held a meeting at this result demonstration.
17. Held Tobacco Tour to the Oxford Experiment Station with over 100 farmers attending.
18. Started " Super " Small Grain Demonstration consisting of 38 different Plots and covering all phases of Small Grain Production, on the farm of J. O. Crotts, Jr. in Alleghany Township of Davidson County.
19. Pushed program for more alfalfa throughout the year, increasing the acreage in 1947 by approximately 400 acres and bringing the total Alfalfa acreage in the County to around 1400 acres. Extreme dry weather during the summer coupled with the transportation bottleneck on lime hampered the program seriously this year.
20. Secured excellent results with pasture program; the main accomplishment was the purchase of over 6,000 pounds of Ladino Clover seed by farmers, increasing the County's acreage of Ladino to approximately 5,000 acres.

21. Assisted 24 farmers in building Grade A Barns.
22. Assisted in organizing the Davidson Breeder's Cooperative to promote Artificial Breeding of dairy cattle.
- v 23. Helped 127 farmers purchase 94 Registered and 176 high grade dairy animals.
24. 15 farmers built and filled 29 Sisalkraft Temporary Silos.
25. Held County-wide Model Grade A Dairy Barn Demonstration Meeting with 300 attendance.
26. Conducted 4-H Pig Chain with 8 leading club members.
27. Assisted local businessmen and Chamber of Commerce in getting Standard Brands, Inc. to locate a large egg-breaking plant at Lexington.
28. Assisted over 200 poultrymen with flock management and helped 44 farmers cull their flocks.
29. Conducted 4-H Poultry Chain with 10 members.
30. Started 20 demonstrations in cooperation with TVA.
31. Organized 4-H County Council. Held 4 meetings with an average attendance of over 100. Held successful 4-H County Achievement Day with over 200 club members present. Held successful 4-H Camp with 26 boys attending. ✓
32. Placed 23 Baby Beef Calves with boys and girls for projects.

## FARM LABOR PROGRAM

Covering work done by G. M. Hartley, Emergency Farm Labor Field Assistant, from December 1, 1946 to November 30, 1947, inclusive.

## I. INTRODUCTION

I started work as Emergency Farm Labor Assistant on February 2, 1944 following Fred Sechrist, who laid the framework for the program in Davidson County.

## II. METHODS AND ACCOMPLISHMENTS

The work I did this year was on general farm labor work such as placing labor, tenants and sharecroppers on farms and organized farmers with tractors and machinery to help harvest this year's crop and helped in getting transportation to haul farm products to market.

I visited 263 farms on general farm labor work such as getting farm labor farm tenants, sharecroppers, hired farm help, swapping labor, tractors, and machinery to help farmers harvest crops and did some other general type farm labor work.

The Neighborhood Leaders and other farmers were used in helping recruit farm labor, tractors, and farm machinery for custom work, and in other general farm problems.

## Statistical Report

1. Days Devoted to:	By Labor Assistant
A. Exchange of Labor and Equipment .....	36
B. Recruitment .....	6
C. Placement .....	25
D. All Other Work Not Reported .....	16
2. Number of Farms or Farm Homes Visited .....	263
3. Number Non-farm or Non-farm Homes Visited .....	14
4. Number of Office Calls .....	341

5. Number Placements Made During The Year :	By Labor Assistant Agent
A. Men (18 and over) Seasonal .....	10
Year Round .....	18
B. Families Placed as Tenants or Sharecroppers .....	15
6. Number of Different Farmers Ordering Workers This Year	
Seasonal .....	344
Year Round .....	223
7. Number of Workers Ordered By Farmers During This Year	
Seasonal .....	455
Year Round .....	325
8. Estimated Number of Agricultural Workers that Could Be Placed if Available .....	300

#### General Educational Work

The Neighborhood Leaders and other key farmers were visited and the program of swapping labor and equipment was possible for farmers to help each other out in emergencies by farmers who have trucks to haul grain, tobacco, and other general crops to market and in turn haul fertilizer, lime, and other material out on the farm, thereby benefitting all parties concerned.

I find that farmers in all sections of the County did swap labor and equipment with very satisfactory results.

The general reaction to the Farm Labor Program this year has been a favorable one and the farmers in general over the County are of the opinion that this assistance was of much help to them.

#### III. RECOMMENDATIONS

I recommend the following for any future program:

- A. A survey should always be made in advance of any anticipated work.
- B. All requests should be cleared through one person.
- C. The Educational work should be done under the Director of the Agricultural Extension Service.
- D. Time, money, and effort are wasted in trying to place labor on farms that have no farming experience as this type labor expects to work only about eight hours per day or about forty hours per week and receive what organized labor receives and farmers refuse to pay that price for poor labor.
- E. The Farm Labor Program continues to remain very critical. Every effort should be made to continue to help farmers to secure all labor possible.

## STATISTICAL SUMMARY

The following is a Statistical Summary of the activities of the County Farm Agent and the Assistant Farm Agents of Davidson County for the period December 1, 1946 through November 30, 1947, inclusive:

## PERSONNEL TENURE

J. F. Brown, County Agent, December 1, 1946 - November 30, 1947  
 Paul S. Keyes, Assistant Agent, December 1, 1946 - September 30, 1947  
 John M. Watts, Jr., Assistant Agent, December 1, 1946 - November 30, 1947  
 W. R. Crook, Assistant Agent, December 1, 1946 - November 30, 1947

Miles Traveled .....	45,027
Days Worked In Field .....	806.0
Days Worked In Office .....	301.5
Total Farm Visits Made .....	3,336
Total Office Conferences Held .....	2,802
Total Telephone Calls Received .....	3,167
Total Letters Written (personal) .....	3,713
Total Letters Received .....	2,817
Total News Articles Written .....	276
Total Circulars Mailed .....	73
Total Copies of Circulars Prepared .....	15,857
Total Number Meetings Held .....	261
Total Attendance at Meetings Held .....	10,109

Respectfully submitted,

*J. F. Brown*  
 J. F. Brown,  
 County Agent

*John M. Watts, Jr.*  
 John M. Watts, Jr.  
 Assistant County Agent.

*W. R. Crook*  
 W. R. Crook,  
 Assistant County Agent

*Paul S. Keyes*  
 Paul S. Keyes,  
 Assistant County Agent.