

**OKLAHOMA AGRICULTURAL AND MECHANICAL
COLLEGE EXTENSION SERVICE**

W. A. CONNER, *Director*

**COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME
ECONOMICS**

Oklahoma Agricultural and Mechanical College and the United States Department of Agriculture Cooperating

Distributed in Furtherance of the Acts of Congress of May 8 and June 30, 1914

ANNUAL REPORT
EXTENSION DIVISION

*OKLAHOMA A. & M.
COLLEGE, 1920-1921*

Stillwater, Oklahoma

Extension Circular No. 130

January, 1922

LETTER OF TRANSMITTAL

Hon. J. B. Eskridge,
President A. and M. College,
Stillwater, Oklahoma.

Dear Sir:

In accordance with the Act of Congress approved May 8, 1914, to provide for cooperative agricultural extension work, I have the honor to submit herewith the annual report of the Extension Division of the Agricultural and Mechanical College of Oklahoma.

This report embodies the financial statement for the fiscal year ending June 30, 1921, and the report of the activities of the Extension Division for the crop year of 1921.

I respectfully request that you transmit the same in accordance with the law to the Governor of the State of Oklahoma.

Respectfully,

W. A. CONNER,
Director.

REPORT OF THE EXTENSION DIVISION

YEAR OF 1920-1921

Immediately after completing the reports for 1920 the Extension Division began shaping its plans to renew its program for a safe system of agriculture, realizing that the experience of the past year would enable the farmer, business man and banker to understand the importance of the lesson as they had never before.

The slump in prices of farm products following the readjustment of finances after the world war had demonstrated to the most confirmed advocate of the one crop system that it was not only a failure from a financial standpoint, but disastrous in a great emergency like we are facing at this time.

With this fact in mind the Extension Division made a special effort during 1921 to stress the importance of a safe system of farming that would include the producing of all the food and feed possible at home with a surplus for the market, a cropping system that would permit soil improvement and more effective organization that will improve market conditions.

To carry out this program the Extension Division has used its influence in an educational way and by practical demonstrations to assist the farmers of Oklahoma to adopt a diversified system of farming, to improve their seed stock by seed selection and standardization of crops, to conserve the fertility of the soil, to improve the livestock of the State by better breeding and feeding, to eradicate the Texas fever tick in the few remaining infested districts of southern Oklahoma, to eradicate or control the spread of diseases and pests of both crops and livestock, to organize livestock shipping associations, and to organize commodity marketing associations, similar to the Oklahoma Cotton Growers' Association.

The Extension Division also recognized the fact that the problems of producing and marketing crops are not the only factors in a safe and sane system of farming, but the problems of conserving the fruits, vegetables, poultry, dairy and meat products for a bountiful supply of food. The proper understanding of the nutritive values of foods, the installation of home conveniences that will insure sanitary and pleasant surroundings and conserve energy and lighten the burdens of the housewife are just as conducive to success and happiness on the farm as the economical production of crops.

Therefore, the Home Economics department of the Extension Division is constantly engaged in helping the farm women of the State solve these problems in the most systematic and economical way possible under existing conditions.

A full report of the various Extension activities follows under the several project headings.

ADMINISTRATION

There has been no change in the general plan of organization during the past fiscal year, except that the arrangement with the Goodwell District Agricultural School for Professor R. C. Shiflett to do teaching work part time and district agent work in the four Panhandle counties of Oklahoma part time was discontinued.

James A. Wilson resigned his position as the Director of the Extension Division to accept the position of head of the Rural Economics Department of the College and the Board of Regents elected Mr. W. A. Conner to fill this position. Mr. Conner assumed charge of Extension Division work July 1, 1921. Miss Emma A. Chandler resigned as State Home Demonstration Agent November 15, 1920, and

Miss Frances L. Brown of Manhattan, Kansas, was chosen to fill this important position, assuming her duties on February 16, 1921.

The work was carried on under the following projects: 1, Administration; 2, Printing and Publications; 3, County Agents; 4, Boys' Club Work; 5, Home Demonstration and Girls Club work; 6, Rural Sanitation; 7, Extension Work for Negro Men and Boys; 8, Extension Work for Negro Women and Girls; 9, Poultry Club Work; 12, Dairy Extension Work; 13, Livestock Extension Work; 14, Extension Work in Agronomy; 16, Farm Engineering; 18, Horticulture; 20, Cotton Classing and Marketing; 21, Rodent Eradication.

The cotton classing and marketing project was discontinued early in the fiscal year for the reason that it seemed that the Oklahoma Cotton Growers' Association would probably handle the work effectively.

The rural sanitation project was discontinued also when the leader, Dr. D. B. Tucker, resigned.

The Director of Extension who is the joint representative of the Agricultural and Mechanical College and the United States Department of Agriculture, has general supervision of all agricultural extension activities. The heads of the various subject matter departments are considered final authority on all subject matter problems. The relations between the various departments of the College and the Extension Division continue very friendly with an evident disposition on the part of all to be mutually helpful. Also the friendly and cooperative relations continue to exist between the Extension Division and other organizations in the State, especially the State Superintendent of Education and the several county superintendents.

There were mailed out from the Extension Division during the fiscal year ending June 30, 1921, 12,063 personal letters, 182,487 circular letters, 115,991 bulletins, 943 packages, 5,839 posters, 56,459 record books and 230,000 copies of the Extension News, making a total of 603,782 pieces of mail matter.

The only additional office equipment purchased this year were two sectional transfer cases with base and one Underwood typewriter.

PERSONNEL

On June 30, 1921, there were 72 county agents, five district agents, and one assistant district agent for the men's work. There were 37 home demonstration agents, two district agents and three assistant home demonstration agents for the women's and girls' work. In the work for negroes there were 10 negro men agents, including one district agent, and four negro women agents. There were eight specialists, one boys club agent and two assistant boys club agents and 13 members of the office force. These with the Director, Assistant Director, Assistant State Agent and the State Home Demonstration Agent, constituted the Extension Division. This was an increase over the same date last year of one county agent, one negro man agent, one specialist and the addition of an Assistant State Agent; a decrease of three home demonstration agents, one district agent for men's work and one assistant State boys club agent.

The following is a complete list of all persons employed in the Extension Division during the fiscal year ending June 30, 1921, except students employed for short periods of time to assist in mailing out bulletins, circulars, etc., and other irregular work in the Extension Division:

OFFICE FORCE

James A. Wilson, Director and State Agent.
 W. D. Bentley, Assistant Director.
 W. R. Shelton, Assistant State Agent.
 E. B. Shotwell, State Boys' Club Agent.
 P. H. Lowery, Assistant State Boys Club Agent.
 M. W. Chase, Assistant State Boys Club Agent.
 C. A. Patterson, Assistant State Boys Club Agent. (Resigned).
 C. M. Smith, Poultry Club Agent.
 E. O. Edson, Assistant Poultry Club Agent.
 C. W. Radway, Dairy Husbandry.
 D. C. Mooring, Extension Horticulturist.
 B. J. Melton, Biological Assistant.
 C. F. Mitchell, Cotton Specialist.
 R. W. Clark, Livestock Specialist.

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Miss E. A. Chandler, State Home Demonstration Agent. (Resigned).
 Miss Frances L. Brown, State Home Demonstration Agent.
 Dr. D. B. Tucker, Special Agent in Rural Sanitation.
 Miss Martha McPheters, Assistant State Home Demonstration Agent.
 Miss Anna Lee Diehl, District Agent.
 Mrs. Daisy M. Frazier, District Agent.
 Miss Norma M. Brumbaugh, Assistant State Home Demonstration Agent.
 Mrs. Nannie Collins, Assistant State Home Demonstration Agent.
 Miss Lethe Morrow, Office Manager.
 Mrs. Marian Wade, Secretary.
 Mrs. Abigail Morgan, Bookkeeper. (Resigned).
 Miss Bess G. Finley, Bookkeeper.
 Miss Nellie Knight, Mailing Clerk.
 Mrs. Minnie Smith, Assistant Mailing Clerk.
 Miss Minnie McCoy, Stenographer.
 Ruth Cox, Stenographer.
 Mrs. Grace Weilmuenster, Stenographer.
 Miss Ethel Clausen, Filing Clerk.
 Mrs. Bertha Briggs, Statistical Clerk.
 Miss Lola Oldham, Stenographer. (Resigned).
 Miss Grace Poole, Stenographer.
 Miss Neoma Wallis, Multigraph Operator. (Resigned).
 Miss Irdle Finley, Multigraph Operator.
 Miss Marguerite Purse, Stenographer.

DISTRICT AGENTS

C. W. Callarman has supervision of the following counties: Canadian, Carter, Cleveland, Garvin, Grady, Jefferson, Johnston, Kingfisher, Logan, Love, McClain, Marshall, Murray, Oklahoma and Stephens.

Dan Diehl has supervision of the following counties: Beckham, Blaine, Caddo, Comanche, Cotton, Custer, Dewey, Ellis, Greer, Harmon, Jackson, Kiowa, Roger Mills, Tillman, and Washita.

B. F. Markland has supervision of the following counties: Alfalfa, Beaver, Cimarron, Creek, Garfield, Grant, Harper, Kay, Lincoln, Major, Noble, Okfuskee, Pawnee, Payne, Texas, Woods and Woodward.

T. A. Milstead has supervision of the following counties: Atoka, Bryan, Choctaw, Coal, Haskell, Hughes, Latimer, LeFlore, McCurtain, McIntosh, Pittsburg, Pontotoc, Pottawatomie, Pushmataha, and Seminole.

G. W. Vincent has supervision of the following counties: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Nowata, Okmulgee, Osage, Ottawa, Rogers, Sequoyah, Tulsa, Wagoner, and Washington.

COUNTY AGENTS

Adair	Stilwell	G. E. Davis
Alfalfa	Cherokee	G. F. Newton
Atoka	Atoka	A. E. Cook
Beaver	Beaver	W. B. Hanly
Beckham	Sayre	T. J. Eldredge
Blaine	Watonga	J. M. Rapp
Bryan	Durant	G. B. Dunlap
Caddo	Anadarko	I. E. Nutter
Canadian	El Reno	F. K. West
Carter	Ardmore	J. L. Denniston (resigned)
Carter	Ardmore	J. W. Simpkins
Choctaw	Hugo	J. A. Wyatt
Cimarron	Boise City	C. S. Andrew
Cleveland	Norman	P. K. Norris
Coal	Colgate	W. T. Yoakum
Comanche	Lawton	C. C. Stinson
Craig	Vinita	G. E. Thomas
Creek	Bristow	J. W. Riley
Custer	Clinton	I. D. Frantz (resigned)
Custer	Clinton	C. H. Gernsey
Dewey	Taloga	W. F. Porter
Ellis	Arnett	F. F. Parker (resigned)
Ellis	Arnett	N. A. Wolff (resigned)
Ellis	Arnett	Tom M. Marks
Garfield	Enid	D. T. Meek
Garvin	Pauls Valley	A. T. Burge
Grady	Chickasha	J. W. Owens (resigned)
Grady	Chickasha	A. F. Houston
Grant	Medford	F. R. Merrifield (transferred)
Greer	Mangum	R. T. Lee
Harmon	Hollis	G. L. Gibbs
Harper	Buffalo	E. A. Porter
Haskell	Stigler	J. L. Schad
Hughes	Holdenville	T. A. Vanderpool
Jackson	Altus	R. E. Berry
Jefferson	Ryan	C. C. Stinson (transferred)
Jefferson	Waurika	C. P. Cox
Johnston	Tishomingo	J. P. Gray
Kay	Newkirk	J. F. Riddell (resigned)
Kay	Newkirk	C. S. Merydith (resigned)

Oklahoma Agricultural and Mechanical College

Kay	.....Newkirk	.....W. F. Gray (deceased)
Kingfisher	.....Kingfisher	.....Clyde McFeaters
Kiowa	.....Hobart	.....L. E. Charlton (resigned)
Kiowa	.....Hobart	.....A. I. Jordan
Latimer	.....Wilburton	.....N. C. Ward
LeFlore	.....Poteau	.....H. W. C. Shelton
Lincoln	.....Chandler	.....J. W. Guin
Logan	.....Guthrie	.....J. R. Wiley
Love	.....Marietta	.....R. F. Waters
McClain	.....Purcell	.....W. Cromwell
McCurtain	.....Idabel	.....A. L. Edmiston
McIntosh	.....Eufaula	.....H. L. Bankhead
Major	.....Fairview	.....H. B. Binkley
Marshall	.....Madill	.....W. E. Martin
Mayes	.....Pryor	.....C. R. Jackson
Muskogee	.....Muskogee	.....J. M. Daily (resigned)
Muskogee	.....Muskogee	.....R. C. Moore (resigned)
Muskogee	.....Muskogee	.....J. M. White
Noble	.....Perry	.....S. E. Laird
Nowata	.....Nowata	.....H. M. Wolverton
Okfuskee	.....Okemah	.....E. A. Kissick
Oklahoma	.....Oklahoma City	.....C. R. Donart
Okmulgee	.....Okmulgee	.....D. P. Trent
Osage	.....Pawhuska	.....S. M. McCuiston
Ottawa	.....Miami	.....Jas. Lawrence
Pawnee	.....Pawnee	.....M. T. Maudlin
Payne	.....Stillwater	.....L. E. Rathbun
Pittsburg	.....McAlester	.....E. B. Nelms
Pontotoc	.....Ada	.....J. B. Hill
Pottawatomie	.....Shawnee	.....E. R. Henson
Pushmataha	.....Antlers	.....George Innes
Roger Mills	.....Cheyenne	.....A. I. Jordan (transferred)
Roger Mills	.....Cheyenne	.....J. R. Waldby
Rogers	.....Claremore	.....J. R. Spencer
Seminole	.....Wewoka	.....H. G. Howard
Sequoyah	.....Sallisaw	.....Fred Ingram
Stephens	.....Duncan	.....Ben Harrison
Texas	.....Guymon	.....J. B. Hisey
Tillman	.....Frederick	.....J. W. Simpkins (transferred)
Tillman	.....Frederick	.....S. D. Johnson
Tulsa	.....Tulsa	.....J. S. Malone
Wagoner	.....Wagoner	.....C. M. Hubbard
Washington	.....Bartlesville	.....C. C. Porter
Washita	.....Cordell	.....H. Garland
Woods	.....Alva	.....W. D. Kennon
Woodward	.....Woodward	.....W. F. Gray (transferred)
Woodward	.....Woodward	.....F. R. Merrifield

COLORED MEN AGENTS

District Agent	.....Langston	.....W. A. Hill
Kingfisher	.....Kingfisher	.....Lafayette Shawnee
Logan	.....Guthrie	.....G. W. Powdrill
Creek and Lincoln	.....Chandler	.....W. M. Mingo
Muskogee and S. E.	.....Muskogee	.....Levi Nelson (resigned)
Wagoner	.....	.....J. V. King
McCurtain	.....Idabel	.....J. W. Shoals
McIntosh	.....Eufaula	.....L. W. Presley
Okfuskee	.....Bucy	.....J. E. Taylor
Seminole	.....Wewoka	.....E. R. Moore
Okmulgee	.....Okmulgee	.....P. M. Mann

HOME DEMONSTRATION AGENTS

Bryan	.....Durant	.....Miss Fannie Buie
Caddo	.....Anadarko	.....Miss Vera Miller (resigned)
Caddo	.....Anadarko	.....Miss Mamie Boynton
Canadian	.....El Reno	.....Mrs. Mary Ruff
Carter	.....Ardmore	.....Mrs. Minnie B. Church
Coal	.....Coalgate	.....Miss Pearl Black (resigned)
Comanche	.....Lawton	.....Miss Lonna Speer
Creek	.....Bristow	.....Miss Edna I. Whitaker
Custer	.....Clinton	.....Miss Lena Gernett (resigned)
Custer	.....Clinton	.....Miss Lena Blair
Garfield	.....Enid	.....Mrs. A. N. Southwick
Garvin	.....Paula Valley	.....Mrs. Lena Gentry
Grady	.....Chickasha	.....Miss Carolyn Jones (resigned)
Grady	.....Chickasha	.....Mrs. Nettie R. Coryell
Greer	.....Mangum	.....Mrs. Helen Condon
Harper	.....Buffalo	.....Mrs. Ida E. Sweet
HaskellStiglerMiss Lena B'air (transferred)
KiowaHobartMiss Edith Huffer

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Latimer	Wilburton	Mrs. Elizabeth Ward
LeFlore	Poteau	Mrs. M. A. E. Shelton
Logan	Guthrie	Mrs. Mary Langton (resigned)
Logan	Guthrie	Mrs. Jessie Pollock
McCurtain	Idabel	Miss Grace Clowdis
Major	Fairview	Mrs. Flora Bever
Marshall	Madill	Miss Maude Andrews
Muskogee	Muskogee	Miss Ruby Mabry
Muskogee	Muskogee	Mrs. Lulu S. Green
Noble	Perry	Miss Elizabeth Richardson
Okfuskee	Okemah	Mrs. Anna Richards
Oklahoma	Oklahoma City	Miss Ita Rose
Okmulgee	Okmulgee	Mrs. Vera Snelson
Osage	Pawhuska	Mrs. Ginevra Lohman
Pittsburg	McAlester	Mrs. Lyle H. Breckner
Pontotoc	Oakman	Mrs. Elva R. Duvall
Pottawatomie	Shawnee	Miss Mary McCool
Pushmataha	Antlers	Mrs. Lillie Wolfe
Rogers	Claremore	Mrs. Myrtle Watson
Seminole	Wewoka	Mrs. Ethel Howard
Tillman	Frederick	Mrs. Eva Mosteller
Tulsa	Tulsa	Mrs. Katheryn Jackson
Tulsa	Tulsa	Mrs. Sada B. Grommet
Wagoner	Wagoner	Mrs. Dadie Myers
Washington	Bartlesville	Miss Iva M. Burch
Woodward	Woodward	Mrs. Susan B. Gray (resigned)
Woodward	Woodward	Mrs. Emma Stewart

NEGRO HOME DEMONSTRATION AGENTS

Muskogee and Wagoner Muskogee	Miss Aquila Chadwick (deceased)
Muskogee and Wagoner Muskogee	Mrs. Ethel White Brewer
Okfuskee and Seminole Boley	Mrs. Annie Peters Hunter
Okmulgee and McIntosh Okmulgee	Miss Maude Smith
Lincoln	Miss Camilla Stewart (resigned)
Lincoln	Miss Edna Lewis

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PRINTING AND DISTRIBUTION OF PUBLICATIONS

PROJECT NO. 2

The following is a statement of funds expended under this project:

	Smith-Lever	Federal	State
*A—For printing 13 bulletins and circulars; No. of pages, 106. (Total edition, 94000)	\$ 460.25	\$2,705.00	
B—For printing Annual Report: No. of pages, 48 (total edition, 4000)			166.00
C—Illustrations—half tones, etc.	11.65		134.30
D—For envelopes for bulletins, circulars and reports			
E—Personal services and other expenses of distribution	1,045.00		95.00
Total	\$1,516.90		\$3,100.30

The following circulars and other matter were published during the fiscal year ending June 30, 1921, and the cost of printing same is included in the figures given under "A":

- 108 Annual Report.
- 120 Plans for Organizing Boys and Girl's Demonstration Clubs.
- 121 Farm Bureau a Constructive Movement.
- 122 Cooperative Marketing of Livestock.
- 123 County Agent's Relation to Farm Bureau.
- Farmers' Bulletin 1089. Selection and Care of Clothing (reprint).
- Hot Beds.
- Plans for 1921 Adult Club Work.
- Corn Club Bulletin.
- Spanish Peanuts.
- Circular 109 Orchard Spray Calendar (Reprint).
- Circular 110 Vegetable Spray Calendar. (Reprint)
- Sewing Bulletin for Club Members.
- Farm Bureau.
- Issues of Oklahoma Extension News for Year.
- Boys' Beef Club Rules—Fattening Phase 1920-21.
- Pig Club Instructions—Breeding Phase.
- Pig Club Instructions—April, May, June.
- Calf Club Rules—Breeding Phase 1921.
- Poultry Club Instructions for Year.
- Food Lessons for Club Girls—First Year.
- Food Lessons for Club Girls—Second Year.

Cereal Foods.
Protein Foods.
First Year Canning Club Instructions.
First Year Sewing Club Instructions.
Milk Story.
How Good Blood Helped a Dairy.
A Few Suggestions on Care and Marketing of Milk.
Health Primer.
Letter to Oklahoma Bankers.

All printed matter is prepared by members of the Extension Division or of the College faculty. Manuscripts must have the approval of the Director of Extension and be submitted to the College Publications Committee for criticism and approval. The approval of the interested subject matter department of the College must also be secured. Circulars and leaflets are sent to a small, regular mailing list of officials and others, and a small supply sent to county and home demonstration agents to be distributed to interested parties in their respective counties. The regular mailing list is composed of extension workers in other states, colleges, newspapers, libraries and a few others. No attempt is made to maintain a large general mailing list. The Extension News is sent regularly to all club members in addition to the regular mailing list. The mailing list, especially for the Extension News is revised annually.

EXPENDITURES

The total expenditures of the Extension Division for the fiscal year 1920-1921 were as follows:

United States, direct (Farmers' Cooperative Demonstration Work)	\$ 36,938.33
Federal Smith Lever Fund	93,987.74
State Smith Lever fund	83,986.00
Supplementary Federal Extension fund	40,639.23
State Fair School fund	4,757.77
Appropriations by Boards of County Commissioners	144,944.22
Total	\$405,253.29

FINANCIAL STATEMENT

Table A—Summary statement of expenditures by projects, showing sources of funds used for Extension work:

	Total	U. S. D.A.	Supp. Fed. Ext.	Federal	Smith-Lever State	College	County
Administration	26,360.66	3,600.00	.....	13,811.83	8,857.14	.....	91.69
Printing	4,617.20	.....	.....	1,516.90	3,100.30	.....	.....
County Agents	204,440.11	17,075.66	39,074.23	16,878.09	23,639.05	.....	107,773.08
Boys' Club Work	18,457.78	2,050.00	.....	7,991.24	5,244.69	3,171.85	.....
Home Economics	99,554.26	9,661.00	1,565.00	23,845.43	25,865.35	1,585.92	37,031.56
Rural Sanitation	3,361.31	.....	.....	50.00	3,311.31	.....	.....
Colored Men and Boys	19,865.50	4,083.33	.....	14,232.44	1,549.73	.....	.....
Colored Women and Girls	6,381.72	468.34	.....	1,344.77	4,568.61	.....	.....
Poultry Club Work	6,566.21	.....	.....	3,871.19	2,647.13	.....	47.89
Dairy Club Work	4,876.91	.....	.....	3,498.37	1,378.54	.....	.....
Livestock Club Work	2,700.34	.....	.....	152.33	2,548.01	.....	.....
Horticulture	3,900.39	.....	.....	2,937.50	962.89	.....	.....
Cotton Classing	3,570.90	.....	.....	3,307.65	263.25	.....	.....
Rodent Eradication	600.00	.....	.....	550.00	50.00	.....	.....
	\$405,253.29	\$36,938.33	\$40,639.23	\$93,987.74	\$83,986.00	\$4,757.77	\$144,944.22

FINANCIAL STATEMENT

Table B—Summary statement of expenditures by projects, showing classification of expenditures from all funds used for Extension work except the United States direct:

Items of Expense	Total	Administration	Printing	County Agents	Home Dem. Work	Home Ec Specialists	Boys' Club Work	Rural Sanitation
Salaries	\$316,868.64	\$16,686.38	.....	\$175,919.92	\$74,125.92	3,361.67	\$ 7,964.93	\$2,149.95
Labor	1,302.49	118.05	.....	5.10	765.15	.....	400.19	.....
Printing and distribution	4,617.20	.....	\$4,617.20	.....	.....	.....	.....	.....
Stationery, small printing	3,925.86	554.85	.....	1,229.91	1,092.25	.....	797.86	.....
Postage, telegraph, etc.	1,245.90	318.03	.....	459.78	241.66	.....	120.33	22.20
Heat, light, etc.	720.35	720.35	.....	.....	.....	.....	.....	.....
Supplies	114.37	21.06	.....	.....	60.22	.....	8.60	.....
Library	19.33	15.00	.....	.....	3.83	.....	.50	.....
Tools, machinery, etc.	19.14	16.14	.....	.....	3.00	.....	.....	.....
Furniture and fixtures	324.49	316.34	.....	.....	8.15	.....	.....	.....
Scientific apparatus, etc.	17.55	.....	.....	.....	.....	.....	.....	.....
State Fair School	4,757.77	.....	.....	.....	1,585.92	.....	3,171.85	.....
Traveling expenses	34,378.27	3,994.46	.....	9,749.74	6,599.30	2,042.59	3,943.52	1,189.16
Contingent expenses	3.60	.....	.....	.....	3.60	.....	.....	.....
Total expenditures	\$368,314.96	\$22,760.66	\$4,617.20	\$187,364.45	\$84,489.00	\$5,404.26	\$16,407.78	\$3,361.31

Table B—(Continued)

Items of Expense	Colored Men and Boys	Colored Women and Girls	Poultry Club Work	Dairy Club Work	Livestock Work	Horticulture	Cotton Classing	Rodent Eradication
Salaries	\$14, 828.98	\$5,885.21	\$4,199.93	\$3,224.96	\$1,833.33	\$2,724.96	\$3,362.50	\$600.00
Labor .....	.....	.....	.....	.....	14.00	.....	.....	.....
Printing .....	.....	.....	.....	.....	.....	.....	.....	.....
Stationery, etc.	7.57	.....	27.67	122.50	42.50	.....	50.75	.....
Postage, etc.	3.04	.....	7.55	40.51	3.65	21.83	7.32	.....
Heat, light, etc. ....	.....	.....	.....	.....	.....	.....	.....	.....
Supplies .....	.....	.....	.....	14.26	4.85	5.38	.....	.....
Library .....	.....	.....	.....	.....	.....	.....	.....	.....
Tools, etc. ....	.....	.....	.....	.....	.....	.....	.....	.....
Furniture, etc. ....	.....	.....	.....	.....	.....	.....	.....	.....
Scientific Apparatus .....	.....	.....	.....	17.55	.....	.....	.....	.....
State Fair School .....	.....	.....	.....	.....	.....	.....	.....	.....
Travel expense	942.58	28.17	2,331.06	1,457.13	802.01	1,148.22	150.33	.....
Contingent .....	.....	.....	.....	.....	.....	.....	.....	.....
Total	\$15, 782.17	\$5,913.38	\$6,566.21	\$4,876.91	\$2,700.34	\$3,900.39	\$3,570.90	\$600.00

COUNTY AGENT WORK

PROJECT 3

The county agent work for the fiscal year 1920-1921 has been to assist the farmer in readjusting his farm program so that he may recover from the effects of the demoralized market of farm crops in which he has suffered heavy losses the past year, which in many cases was almost financial ruin, especially with the one crop farmer. The county agents have always advocated a system of diversified farming that would furnish ample food supply for the family and feed for the livestock, but on account of the low price of farm products, they have never before been able to arouse public sentiment in favor of that system as they have in the last year and there has never been a time when the services of the county agents have been in so much demand as they have been in the last year in Oklahoma.

The demoralized market condition of farm crops has created a great deal of interest in cooperative marketing organizations and the county agents have been very active in assisting these organizations in an educational way. The farmers of Oklahoma have organized and incorporated several associations for marketing farm crops, the largest being the Oklahoma Wheat and Cotton Growers' Associations. They have been very active in cooperative buying and a great saving has resulted from this line of work, especially in the purchase of feed, seed, coal, binder twine, fertilizers and similar commodities.

The fourth annual Farm Congress and agents' meeting was held in Stillwater August 24-31, 1921. There were 63 county agents and 32 home demonstration agents present. The first four days were given over to the general Farm Congress activities during the first period in the morning, followed by subject matter work given by different departments of the College in the second period. The first period in the afternoon was given to farm association meetings and the second to visiting the College buildings and College farm. Sunday was devoted to a special community building program that was filled with interesting lectures along the line of improving social conditions in the rural districts. The last three days were devoted to county agents' reports and administrative matters relative to extension work in the counties.

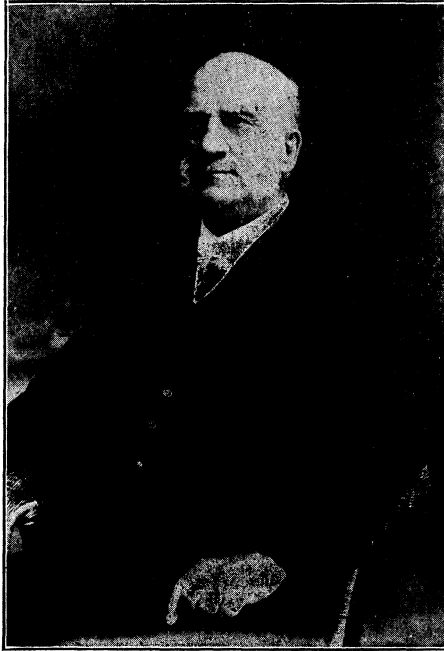
The State has not suffered any severe outbreak of livestock diseases the last year. This is partly due to the fact that the county agents have taught the farmers to vaccinate for cholera, blackleg and similar diseases or call a veterinarian at the first signs of an outbreak in their herds.

In order to carry out the county agent plan of work as submitted in the beginning of the year, the work was divided into four classes of activities to be conducted during 1921. First, field crop demonstration; second, livestock demonstration; third, special demonstration; fourth, organization work.

The following statistics and narrative accounts are submitted as a partial report of results accomplished by the county agents during the crop year 1921.

The agents report having 531 corn demonstrators of whom 368 made reports. These demonstrators made an average of 43.4 bushels per acre which was 16.2 bushels more than the average yield for similar land near by. There were 194 kafir demonstrations. The average yield for the 129 reporting was 35 bushels per acre. 58 milo demonstrations yielded an average of 34.5 bushels per acre.

There were 13 darso demonstrations which made an average yield of 38.2 bu. per acre and 12 Hegari demonstrations making a yield of 33 1-3 bushels per acre. There were 714 cotton demonstrators, 252 of whom made reports. Those reporting averaged 712 pounds of seed cotton per acre. There were 39 tomato demonstrations, 27 of them yielding an average of 125.9 bushels per acre. There were 473 wheat demonstrators and 370 of them made reports. The average yield of those reporting was 21.9 bushels per acre. There were 204 oat demonstrators. 147 of them reported an average yield of 35.7 bushels per acre. There were nine rye demonstrators. Five of them reported an average yield of 14 bushels per acre. There were 157 barley demon-



DR. S. A. KNAPP

At an early period it was found necessary to evolve from the mass of ethical teaching, a few general rules for living, called "The Ten Commandments", by which a man could be moral without going through a course in theology. Just so, in order to instruct the average farmer how to successfully conduct his farm operations so as to secure a greater net gain from the farm, it is necessary to first deduce from the mass of agricultural teachings a few general rules of procedure. They are called "The Ten Commandments of Agriculture," by the practice of which a man may be a good farmer in any state without being a graduate from a college of agriculture.

DR. S. A. KNAPP'S TEN COMMANDMENTS OF AGRICULTURE

1. Prepare a deep and thoroughly pulverized seed bed, well drained; break in the fall to the depth of 8, 10 or 12 inches, according to the soil, with implements that will not bring too much of the subsoil to the surface: (the foregoing depths should be reached gradually).
2. Use seed of the best variety, intelligently selected and carefully stored.
3. In cultivated crops, give the rows and the plants in the rows a space suited to the plant, the soil and the climate.
4. Use intensive tillage during the growing period of the crops.
5. Secure a high content of humus in the soil by the use of legumes, barnyard manure, farm refuse, and commercial fertilizers.
6. Carry out a systematic crop rotation with a winter cover crop on southern farms.
7. Accomplish more work in a day by using more horse power and better implements.
8. Increase the farm stock to the extent of utilizing all the waste products and idle lands of the farm.
9. Produce all the food required for the men and animals on the farm.
10. Keep an account of each farm product, in order to know from which the gain or loss arises.

strators. 110 of them reported, the average yield being 32.4 bushels per acre. There were several other small grain demonstrations of various kinds.

More interest was shown this year in hay crops than ever before. In all there were 739 demonstrators in hay crops of various kinds. There were 258 sweet clover demonstrations, 182 Sudan demonstrations, 172 alfalfa demonstrations and the rest were in other hay and pasture grasses. Much interest was shown in Sudan and sweet clover as pasture grasses. There was more interest in peanuts than last year, there being 158 peanut demonstrators, 86 of whom made reports. The average yield of those reporting was 43.6 bushels of nuts and 2.3 tons of hay per acre. There were 150 cowpea demonstrators, 92 of whom made reports. The average yield per acre was 14.5 bushels of seed and 1.6 tons of hay. There were 29 other legume demonstrations. There were 200 Irish potato demonstrators, 108 of whom made reports. The average yield of those reporting was 80.8 bushels per acre. There were 196 sweet potato demonstrators of whom 117 made reports. The average yield of those reporting was 142 bushels per acre.

A great deal of interest was taken this year in home orchard demonstrations. There were 2505 orchard demonstrators with a total of 56,646 trees. There were 961 orchards inspected by the agents and through their influence 660 were pruned, 433 sprayed, 189 treated for borers and 152 new orchards were planted.

All the agents were active along livestock improvement lines. Through their influence 71 purebred stallions, 45 jacks, 108 brood mares were purchased. In dairy work 256 bulls, 1221 purebred cows and heifers were brought into the counties. Through the influence of the agents 2147 cows have been tested to determine the profitable milk producers, 1915 farmers have been induced to feed a better balanced ration to their stock. All the agents were especially active in pushing all lines of dairy work.

In the beef breeds of cattle the county agents influenced the bringing in of 370 purebred bulls, 748 purebred cows or heifers, and also 4567 grade cows for breeding purposes. 141 dipping vats were built, 10 of which the agents helped construct. There were 584 purebred boars and 2422 purebred sows purchased through the influence of the county agents. They also assisted the farmers in selling 10,455 purebred hogs. There were 531 hog feeding demonstrations of which 271 kept records. The agents influenced the bringing in of 56 purebred rams and 161 purebred ewes. They assisted in the selling of 581 purebred sheep. There were 934 poultry demonstrations in addition to the boys and girls poultry club work.

The agents during the past year have been quite as active in animal disease work as formerly; however, farmers seem to be depending more and more on their own efforts in the vaccination of animals for blackleg, cholera, etc. These diseases seem to be controlled much better than in the past. 49 of the agents own instruments for vaccination demonstrations. Many farmers have sets of instruments and do their own vaccination work. The agents report a total of 55,991 cattle and 72,767 hogs treated for various diseases which is a much smaller number than were treated last year, which would seem to indicate that animal disease control methods are becoming more effective and that a very large percent of the farmers are becoming proficient in the treatment of the common diseases of livestock.

The agents advised 2800 farmers in the proper use of commercial fertilizers. There were 371 fertilizer demonstrations containing a total of 4531 acres. This was an approximate increase of 50 percent over the fertilizer work of last year, which indicates a growing interest in the use of commercial fertilizers. The use of commercial fertilizer is discouraged in the western half of the State on account of irregular and sometimes deficient rainfall. Farmers are encouraged to take better care of and make better use of farm manure. The agents report 110 manure spreaders purchased through their influence during the year.

The agents report a total of 2404 silos in their counties, 105 of which were built this year. There were 98 demonstrators in the use of lime on the soil, 60 of whom made reports. The soil on 136 farms was tested for acidity.

Many improvements were made on the farms and in the farm homes through the influence of the county agents. They report 636 new buildings erected, 1057 farm buildings improved, plans furnished for 360 new buildings, 953 farm buildings paint-

ed or whitewashed, 270 home water systems installed or improved and 400 lighting systems installed. 813 farm and home sanitary conditions were improved, 10,076 homes screened against flies and mosquitoes, 493 sanitary privies erected, 77 septic tanks installed, 220 telephones installed and 1408 plans furnished for systematic crop rotations. 102 drainage systems were established and 27,133 acres drained. 2509 farmers were induced to terrace their sloping lands and a total of 21,671 acres terraced.

In the discharge of their official duties the agents made a total of 82,553 visits to demonstrators, other farmers, business men and club members, traveled a total of 542,944 miles, received at office and home relative to work 89,747 personal calls, and 105,159 telephone calls, attended 4,788 farmers' meetings held under the auspices of the agent or the Extension Division, attended and made addresses at 7120 meetings of all kinds with an approximate attendance of 341,295. 35.8 percent of the agents' time was spent in the office and 64.2 percent in the field. They wrote 85,339 official letters, prepared 3492 articles for publication, prepared and sent out 3664 different circular letters with a total of 180,934 copies, sent out a total of 95,239 bulletins of various kinds, made 4695 visits to schools, assisted in 553 extension schools or short courses with a total attendance of 10,014 and were engaged in these schools 211 days. 264 club boys entered College for the first time this year. The agents were visited by specialists from College or Department 1223 times. 60 agents report having held county fairs and 11,813 demonstrators, cooperators or club members made exhibits at fairs, a very large majority of them winning prizes.

White agents report having 11 negro demonstrators with a total of 233 acres under improved methods and 45 negro cooperators with a total of 1205 acres under improved methods. 12 negro farmers planted pure seed on their demonstrations. Approximately 50 negro farmers in white agents' territory followed demonstration methods.

For the purpose of giving a clearer understanding of the county agent work the following abbreviated district agent annual reports are made a part of this report:

SOUTHWEST DISTRICT

By Dan Diehl

The beginning of the calendar year in the southwest district of Oklahoma found the farmers with a lot of cotton on hand that they could not sell. The year 1920 produced one of the largest cotton crops ever grown and the market dropped to a very low price; in fact, so low that much of the 1920 cotton was never picked. There was no money to pay for picking it and the cotton would not bring enough to pay for the picking and ginning. This condition together with the low price of grain and livestock left the whole country in a bad shape financially.

For a number of years the Extension Division has tried to get the farmers not to depend on one crop alone but to keep a few cows, some hogs and chickens and raise enough grain to feed them. The low price of farm crops had made it very hard on the farmer who had grown but one crop and had no stock or produce to sell.

There is a great deal of credit due the county agents in southwest Oklahoma for the fine condition that exists. The county agents last spring talked small acreage of cotton and large acreage of feed crops. The result is this fall that cotton has made a small yield, yet it has brought a good price, while the yield of grain crops has been small yet the large acreage planted insures plenty of feed. Nearly all farmers in southwest Oklahoma have cows and a good flock of hens. There are more farmers in this district who have hogs than in any previous year, yet many others do not have a sufficient number to supply them with meat for the year. There are very few farmers that have large numbers of hogs on their farms to feed out. I doubt if southwest Oklahoma has ever diversified so much before. Every farmer planted a good garden, lots of potatoes, both Irish and sweet, and many have enough in their cellars to run them through the winter. The farmers have caught the spirit of raising the things they need on the farm and under these conditions the farmers of southwest Oklahoma will not suffer this winter.

Ellis County.

Ellis county, with Tom Marks for county agent, is making great strides along better livestock lines. Mr. Marks has a large number of boys and girls in the pig and calf clubs and is getting large numbers of farmers to get purebred sires to head their herds. He is now trying a number of demonstrations in sweet clover, Sudan grass and darso, together with wheat for pasture.

Dewey County.

Under the leadership of W. F. Porter, county agent, Dewey county is forging to the front. Mr. Porter started a number of boys in the pig club three years ago and now there are several farmers with purebred hogs and quite a number of purebred cattle in Dewey county. Mr. Porter organized a livestock association two years ago and through the association has built up the interest in livestock until now it is the center of purebred stock for miles around.

Mr. Porter has interested a number of farmers in other parts of his county in pure seed wheat and it has proven a fine investment, averaging from 4 to 12 bushels more to the acre than ordinary seed wheat. His club boys and parents held a sale of purebred hogs at Seiling on October 19. Mr. Porter is creating a demand for more dairy cows in this section. Every railroad town in the county has, or is now organizing, a cooperative elevator.

Blaine County.

J. M. Rapp has been county agent in Blaine county for several years. He has won the first prize as a county exhibit at the Oklahoma State Fair four times as follows: 1917, 1918, 1919 and 1921. In 1920 he took third place. Mr. Rapp bought 20 bushels of Kanred seed wheat five years ago and put out several demonstrations to test it out in comparison with other wheat. In each case the yield of the Kanred was the greater. He then shipped in a car load the next year and as a result more than half the wheat grown in Blaine county this year was Kanred. It averaged seven bushels more to the acre than other wheat. Bankers in Blaine county estimate that Mr. Rapp saved or made the county at least \$1,000,000 by getting the farmers to sow pure seed. Mr. Rapp does not stop with just seed but has developed the purebred livestock in his county until it ranks close up to the top as a purebred livestock county.

Custer County.

C. H. Guernsey has now been county agent in Custer county a little over one year and in that time he has won the respect of the best farmers who look upon him as a real leader. He has perhaps more boys in the club work than any other county agent in the district. Mr. Guernsey has talked diversified farming and urged keeping milk cows and sows and hens until Custer county is one of the best livestock counties in the district and the people are all very prosperous.

Roger Mills County.

J. R. Waldby is county agent and is doing some splendid work with the boys and girls clubs. He seems to get the cooperation of the teachers throughout the county. He has also had the cooperation of the county superintendent and together they have organized and consolidated a number of schools, until nearly every district that the roads will permit has been consolidated.

One thing noticeable when you go to one of his community meetings is that the farmers all have a respect for his opinion on agriculture and livestock subjects. The school children are always glad to see him come to their school.

Beckham County.

Mr. T. J. Eldredge is now serving his third year as county agent in Beckham county and from all appearances there is no opposition to him from any quarter. This year besides his other work he has put on a better sires campaign, a rat extermination campaign and a better home, flowers and tree campaign. He has scattered pure seed all over his county and improved the livestock through his club work and has both the children and parents working with him. Beckham county farmers have learned to diversify their crops, growing lots of feed for livestock and depending upon wheat, oats and cotton as money crops.

Washita County.

Washita county, under the leadership of Hiram Garland as county agent, has diversified more each year. The farmers are milking more cows, raising more hogs on the farms. Some of the good work Mr. Garland has done this year is a large number of sweet clover and Sudan demonstrations for pasture and hay crops. He succeeded last fall in getting the farmers to sow one carload of Kanred wheat. All of this wheat averaged 7 bushels to acre more than Turkey Red and mixed wheat sown by the other farmers in Washita county. Most of this was kept for seed and a large portion of Washita county will standardize on Kanred wheat another year.

Another good piece of work by Mr. Garland was to get all the farmers who had purebred cattle to have them tested by a government veterinarian for tuberculosis. Many reactors were found, 27 head in one herd. This work was timely and will save many a good animal for the future.

Caddo County.

This county is almost solidly organized by the Farmers' Union and the Union backs the county agent, Mr. I. E. Nutter, in his work throughout the county. Mr. Nutter believes in the cooperative marketing of farm products and has been a big factor in getting the cooperative elevators, gins and cotton growers organized. He is recognized by all as a real leader and a good business man. He has pushed the garden and truck farming so that the farmers might have a living off the farm. He has some splendid boys club work in cotton, corn and kafir and a large number of boys in the pig club.

Kiowa County.

A. I. Jordan and Miss Edith Huffer are the agents. They know how to cooperate and at the same time get the cooperation of the adults throughout the county. They have nine adult clubs and they meet with each of them once a month. Mr. Jordan has stressed the importance of keeping a cow, sow and flock of hens on each farm and through these methods much of the prosperity of Kiowa county can be traced. Sweet clover, alfalfa, and Sudan grass have been advocated to furnish pasture and hay for the livestock and as a result a large feed crop has been produced and the livestock are in splendid shape.

Greer County.

Greer county, like many of the other western counties, has a mixed soil, from the blow sand to the hard pan. There are a number of purebred herds of cattle in Greer county and just at this time the dairy cow is very much in demand. Many of the farmers are realizing that the dairy cow is the greatest asset on the farm.

Greer county was settled years ago by southern people who did not know anything but cotton growing. As a result of the bankers and business men insisting on the farmers planting a big acreage of cotton, it has held the county back and has made it hard for the county agent to get the farmers to diversify their crops. However, R. T. Lee as county agent has worked steadily along lines of more livestock and feed crops until this year he has succeeded in getting splendid cooperation with the farmers. A large acreage of feed crops, milo maize, kafir, sorghum, Sudan and a few plots of sweet clover have been planted. A number of farmers are growing more wheat and oats and barley.

Harmon County.

Last spring we put G. L. Gibbs in Harmon county to do some preliminary work. He got so much club work started that we were compelled to send them an agent to finish up the club work. L. I. Bennett has been appointed county agent and is now busy getting in the club reports for the year's work.

Jackson County.

Mr. R. E. Berry, county agent, has spent a great deal of time helping the county superintendent get several one-room country schools consolidated. They have seven consolidated schools in Jackson county. Mr. Berry has done splendid work with the adults but has never done much club work.

Tillman County.

S. D. Johnson is county agent and Mrs. Eva Mosteller home demonstration agent. These two agents know how to work together and have built up one of the best county fairs in the State. Mr. Johnson has been very active in developing livestock and better seed selection throughout the county. He has pushed the boys club work in every phase. I know of no county agent that has done so much toward getting town and country people together as Mr. Johnson. The feeling is the very best.

Comanche County.

C. C. Stinson is county agent and is working hard along lines of club work and community meetings. He went to work March 25th and as he was a stranger in the county it took him a good while to get acquainted with the county. Mr. Stinson expects to specialize in cotton and melon growing, having had a lot of experience in both of these crops.

Cotton County.

G. L. Gibbs did not go to work until October 1. His first job was to put over the county fair, which was a success. He has been working along livestock lines and has already a number of farmers planning to purchase purebred sires. Cotton county is a wheat and cotton county and Mr. Gibbs is trying to get the farmers to secure better seed to plant for next year.

Conclusion.

In conclusion will say that this year there has been a great improvement in the livestock shown at the fairs. The same thing is true of farm crop exhibits. Take for instance the corn exhibits; they were more uniform, showing the careful selection and also a purer strain of variety. These things indicate that the county agents together with the fairs have had a good influence on the farmers and they are learning to select better seed and in many communities are standardizing on certain crops. Many are learning to raise more of their living on the farm. As cotton brought a good price this year it will be hard to keep farmers from planting too large an acreage to cotton next year.

I have spent about 300 days in the field and the balance in the office, have traveled over 15,000 miles by rail and 6,000 miles by auto. I have attended 130 meetings with an attendance of about 9000, have made 140 visits to county agents and visited 125 demonstrators. I feel that the work in the southwest district is in the best shape it has ever been and the extension work is more appreciated by the farmers. Farmers will make greater demands on the extension force for more assistance in marketing their farm products.

SOUTH CENTRAL DISTRICT

By C. W. Callarman

In the beginning of the year's extension activities, commencing December 1, 1920, and ending December 1, 1921, there probably never was a time when there was a greater feeling of insecurity or a more general despondency among the farmers of that section of the State known as the south central district. In practically every county of this district cotton is the principal cash crop and as the 1920 crop was marketed at a price that failed to cover cost of production and marketing, many farmers were unable to meet their obligations with bankers and business men. This condition resulted in giving the county agent the first active cooperation from the banker and business man that he had ever received in establishing a better balanced agriculture and through this cooperation many farmers have been induced to attempt a broader program in their crop plans.

In every county in the district many farmers have been induced to begin in a small way at least, the growing of some livestock and poultry. Gardens and orchards have received more attention than ever before. Great emphasis has been placed on the importance of the farmer raising at home as much of the family food as possible and as a result there is now in the farm homes more vegetables, fruits and meats

canned, dried and otherwise preserved for winter use than ever before. The wisdom of this arrangement has been driven home so forcibly that it will never be forgotten from the fact that the 1921 cotton crop met with disaster equal to that which overtook the 1920 crop in the way of the most serious infestation of Mexican boll weevil ever known in this section, destroying 80 per cent of the crop and leaving the cotton farmer, who depended entirely on cotton, completely stranded. With this experience to back him, the county agent has fearlessly and persistently preached the doctrine of "the living for the family first."

The greatest piece of organization work accomplished during the year was the Oklahoma Cotton Growers' Association, which was put over in 12 counties in this district. In Cleveland, McClain, Garvin and Carter counties more than 80 percent of the cotton growers joined this organization and have marketed their cotton through it. It is too early to estimate the real success of this association as they have up to this date made only the first payment on the cotton received; however, it is the general opinion that the mere fact that the association was on the job has had a decidedly beneficial effect on the local market causing the local buyer to pay a better price as compared with prices paid in adjoining states, comparing prices paid this year with prices paid in other years. The members, although somewhat disappointed in the organization's inability to make quick financial returns, are as a rule standing loyally by the association and it bids fair to be of great benefit to the cotton grower.

There were no changes in the personnel of the county agent force in the south central district during the year, except a new county agent has been appointed in Murray county, taking up the work December 6th. A brief summary of the work by counties follows:

Logan County.

J. R. Wiley, agent in charge of Logan county, has been very successful in carrying on his work through an advisory committee made up of a representative from each of several organizations in the county. His work runs rather to cooperative buying and selling organizations. He also has done some work along livestock lines and has good support from livestock breeders. He has made a fair showing in club work. A really good county fair was held this year in Guthrie as a part of Mr. Wiley's work.

Kingfisher County.

In Kingfisher county, Clyde McFeaters, county agent, is one of the new men. Working in a rather difficult county he has so handled his work that there was little difficulty in securing an appropriation for the continuation of the work. Very little cotton is raised in this county and financial conditions are not so desperate as in boll weevil cotton territory. The county appropriation for county agent work in Kingfisher county is \$1,350.

Canadian County.

Canadian county, where Felix West has been county agent for several years, is going good. The county is well organized under the Grange, which gives fine support to the county agent work. This county raises little cotton so is unaffected by the boll weevil. Through the help and encouragement of the county agent a large county fair was held and a fine exhibit in livestock club work was an outstanding feature of the fair. Mr. West has given active support to building up dairy interests as the easy accessibility to the Oklahoma City markets make this a very profitable line of production. At the same time Mr. West has not neglected beef and pork production. The county commissioners are putting up on the agent's salary \$1500.

Oklahoma County.

C. R. Donart, who has served Oklahoma county as agent for several years, has closed a very satisfactory year. He puts on a strong line-up in community fairs. The friendly competition for premiums in these fairs has been instrumental in developing a general interest in better crops and livestock. Mr. Donart has succeeded in raising county agent work to such a high plane of efficiency that the county appropriates \$2640 on his salary, besides giving him an assistant whose salary is paid

entirely by the county. Practically every crop that is grown in the south central district is grown in this county. Through the county agent work the standard of livestock has been materially raised and there are more purebred dairy cows and purebred hogs than in any other county in this district.

Cleveland County.

P. K. Norris, county agent in Cleveland county, is one of the more recently appointed agents, but he has served his county so satisfactorily that he has already secured the unqualified support of the people with whom he has come in contact. During his short time as agent he has so developed confidence in extension work that it has been possible to finance a home demonstration agent. The county is now putting up for county agent's salary \$1620 and \$1320 for home demonstration work. A fine fair was held in this county and the agricultural extension work is in a fine healthy condition.

McClain County.

Under the leadership of County Agent Word Cromwell, McClain county has made splendid progress. The county agent work was in very bad repute at the time Mr. Cromwell took charge but through his wise and efficient administration, conditions have entirely changed and he can now practically name his salary and it will be paid. Instead of abusing that privilege, however, owing to the unfortunate financial condition of the county, he went before the county commissioners and requested that his salary be reduced and the commissioners would consent to only half the reduction he suggested. They are now paying on his salary \$2100. They have in cooperation with his work built a splendid fair grounds equipment and the banks have worked with him in putting out a large number of purebred livestock. Cotton has been one of the staple cash crops in this county, and in parts of the county they have suffered seriously from boll weevil infestation.

Garvin County.

A. T. Burge, county agent in Garvin county, in the recent effort to organize the Oklahoma Cotton Growers' Association proved clearly his organization ability. His plan of work was so efficient that more than 80 percent of the cotton growers of his county joined the association. He then developed a plan of work for the locals in the way of standardizing the cotton crop and encouraging proper diversification in their farming program, so that if they should never sell a bale of cotton through the association they will have received such benefit that they will make a good investment. Mr. Burge has been active in terracing the hill land of his county and encouraging the growing of better livestock, and the building up of the fertility of the soil.

The future of the county agent work in this county is secure as long as they receive the kind of service Mr. Burge has been giving them. The county commissioners put up \$1320 on the salary of the agent, \$960 for the home demonstration agent and \$960 for travel expense of both agents.

Grady County.

Perhaps nowhere in the State can be found a finer citizenship than in Grady county. There has been an agent working in this county continuously from the time work was started there several years ago until now. This, in connection with the fact that it is a splendid agricultural section, is responsible for a fine condition and results in splendid cooperation in county agent work. Mr. Houston, the present county agent, is doing splendid work. Under his leadership the people of Chickasha have invested \$40,000 in a fair grounds and fair equipment and now have the best county fair equipment in the State. The Grange is the outstanding farmers' organization in the county and is backing the county agent work to the limit.

Stephens County.

Ben Harrison, county agent in Stephens county, is a real livestock man and as the people of this county are more generally interested in livestock farming than any other line of agriculture, everything is working out fine. Mr. Harrison has done some exceptionally good work in the boys livestock clubs and has fine support from local people. The county pays \$2040 on his salary.

Jefferson County.

The county agent work in this county has not developed as we had hoped. A bitterness growing out of a rivalry between two leading towns makes the work in this county more than ordinarily difficult. The county commissioners are putting up \$1560 of the salary paid to the county agent. The principal crop is cotton and we are pushing a campaign for a greater diversification of crops.

Johnston County.

J. P. Gray has worked in this county for several years and has succeeded in putting the county agent work on a high plane, and although the financial situation is bad, growing out of the fact that the boll weevil has totally destroyed the cotton crop two years in succession. A large percent of the farmers in this county are broke and without credit. Only a small percent of the taxes are being paid and consequently the county treasury is also out of funds.

Fortunately, Mr. Gray has, from the beginning, emphasized the importance of increasing soil fertility by growing more legume crops. This called in turn for more livestock through which to market this kind of crop. He has also encouraged growing sweet potatoes and several community curing houses were the result. He has organized a melon growers' association and all this work resulted in the folks who were working with him being in a better position to meet the unfortunate financial condition growing out of the loss of the cotton crop. As a result although the financial affairs of the county are in bad condition generally, there is no disposition to discontinue county agent work and it will continue on its present safe basis.

Carter County.

The outstanding feature of county agent work in this county under the leadership of J. W. Simpkins, has been the club work and one of the fine accomplishments in connection with club work is the splendid cooperation of the teachers of the county from the county superintendent down to the teacher in the remote country districts.

Through the efforts of the county agent and as a result of generous cooperation of business men and farmers, one of the best county fairs in the State was held in Carter county and the development in quality of exhibits, both in livestock and crops is a sure indication that the idea of better farming has taken root. The county commissioners show their appreciation of the work by appropriating for agent's salary \$1860 and \$960 for home demonstration work and \$960 for travel expenses.

Marshall County.

W. E. Martin has won the good will of the farmers of Marshall county by giving assistance in marketing their products to advantage. He has made it a part of his work to keep posted as to market conditions and to keep a check on prices paid by local dealers and has passed the information on to the farmers and has by this means saved for the farmers of Marshall county many times the amount of his salary. Although the order of the day is retrenchment in county expenses as a result of the boll weevil devastation, there has been no question as to the continuation of the county agent work. Mr. Martin in cooperation with the home demonstration agent has so developed the club work in this county that it is considered the leading county in the State in club work. The county pays \$1620 on the salary of the county agent.

Love County.

Perhaps there is no county in the State where low prices for farm crops and boll weevil devastation has more completely demoralized the farmers as a rule than in Love county. Eighty percent of the farmers are tenants of the poorer cotton growing type. They are now without money or credit, their teams and farm equipment would meet only a small portion of their indebtedness and they are in an almost hopeless condition. The county agent, R. F. Waters, is encouraging diversification in every way possible and the people are showing more interest in the program of making the farm yield a living for the family first than ever before. School house meetings are being held and the people are being instructed in methods of feeding and handling cows, poultry and swine in a way that will make it possible to realize a profit from these lines of farming, and the people are showing unusual

interest, whole families coming eight to ten miles to attend and coming day after day.

Mr. Waters seems the type of agent that can do his best work with the adults and the club work in this county has not been developed as it has in other counties; however, the work is well supported and Mr. Waters is highly esteemed by his people. The commissioners pay \$1440 on his salary.

Murray County.

In August of 1920 the county excise board in Murray county in an effort to bring the county expenditures within their financial ability to handle with the funds available, decided to discontinue the county agent work. Murray county being a small mountainous county with the southern half of it given almost entirely to cattle range, it seemed almost impossible to successfully finance the work, especially as such attractive salaries were being offered to men in other lines of work. In view of the fact that during the year preceding three men had given up the work in this county to accept better salaries in other lines of work, it was agreed that there was no choice only to discontinue the work.

The progress made in adjoining counties where agents are working showed up conditions in Murray county so unfavorably that a mass meeting of farmers and business men was called and after the matter was thoroughly discussed, it was agreed to raise the local money necessary to put an agent on in this county. This plan was carried out and December 5 J. N. Horn was appointed county agent and began work with a fine prospect for complete cooperation.

Conclusion.

The district agent has attempted, as he has met the county agent in the field, to convey to him the plans and ideals as they have been developed in the regular conferences with the Director and College forces and other field agents. It has been his purpose to advise him in using special agents so that they may have a constructive, continuous plan of work, rather than have them appear on a program for a speech that may have no correlation to any definite work the county agent may be conducting.

During the war the county agent was called upon to do many things that had little if any connection with his regularly established work and when he had assisted in a production program (as a war measure) that resulted in a tremendous surplus of farm products, it is small wonder that the farmer turned to him for assistance in meeting his marketing problems. Under these conditions, it is not at all strange that for a time, at least, the county agent may have lost his bearings and come to think that the vast important thing in agricultural extension work was marketing farm crops.

Owing to the sudden drop in prices for farm crops and the slowness in the decline in prices of manufactured commodities, which the farmer had to buy, it is not strange that the importance of cooperative buying by farmers was wonderfully magnified in his mind. On the other hand it has been the constant difficult task of the district agent to bring the county agent and the farmers to see that economic production was vastly more important under the present low price condition than when war prices would give a profit under any inefficient production methods. This meant good seed bed preparation, good seed selection, proper cultivation and standardization as well as wise diversification, better livestock and better care of livestock, a properly balanced plan for the farm that would guarantee a living for the farm family first and the maintenance of soil fertility.

We now face the fact that no matter how attractive or how important organized selling and organized buying may have become, these first principles have lost no part of their value. We are forced to acknowledge that we have been so intoxicated with these things that we have forgotten to terrace our cultivated hillsides, we have perhaps paid in wasted fertility and eroded farms, a far heavier tax that we will recover in many years from these processes. The big job of the district agent is to constantly call back to these first principles which were builded into the foundation of agricultural extension work and which are today, as they have been in the past, sure guide posts to success and contentment on the farm.

The agricultural papers, the daily press, the county agent, the business man,

the banker, and the preacher are holding up the doctrine of "the cow, the sow and the hen," and surely we have learned our lesson and are ready to go back with the rest and pay our homage to these, our old friends of the past.

In the discharge of his duties the district agent made 132 visits to county agents, 23 visits to demonstrations, addressed 109 public meetings with an attendance of 10,386, spent 231 days in the field and 80 days in the office and traveled a total of 16,300 miles.

NORTH CENTRAL DISTRICT

By B. F. Markland

The North Central district is composed of the following counties: Cimarron, Texas, Beaver, Harper, Woods, Woodward, Major, Alfalfa, Grant, Garfield, Kay, Noble, Pawnee, Lincoln, Payne, Creek, and Okfuskee. The elevation ranges from 4,000 feet in Cimarron county in the Great Plains country to about 1,000 feet in Okfuskee county and the rainfall from 18 inches in Cimarron to 40 inches in Okfuskee county. With such varied climatic conditions the crops grown also vary greatly. In the north and west we find the wheat belt of Oklahoma, while the eastern part of the district is included in the cotton belt of the State.

At the close of last year the prices of all farm crops had dropped far below that of prices prevailing earlier in the season and most all farm products were selling below the cost of production. The one crop farmer found it very difficult to meet his current expenses of operation and maintain his standard of living. This condition was equally true with the all-wheat or all-cotton grower. This relative low price of farm products and the high cost of living has caused the farmer to give greater consideration to a program of "Safe Farming," a program of producing sufficient food and feed to support the family and supply feed for the livestock. Always maintaining sufficient livestock to make a balanced agriculture and by practicing an intelligent system of crop rotation, thus conserving the fertility of the soil and making it possible to produce more economically.

Throughout the district there is now manifest a greater interest in poultry, dairy cattle and hogs. As evidence of the increased interest in poultry, we need only to point to the many school house poultry shows. In practically all the counties there has been a very material increase in the number and quality of birds shown. Many farmers, who in the past have devoted all their time to one crop, are now devoting much of their time to the production of poultry as a side line, keeping a flock of chickens under approved methods. Dairy cattle are in demand and many farmers are preparing to keep (if not now doing so) a small herd sufficient to give the family plenty of milk and butter, and together with the income from the poultry, have enough to market to meet the current expenses of the family. Many farmers now have at least one brood sow and are in this way utilizing much of the waste into profitable pork production for family use.

Adult Demonstrations.

Crops. The county agents have conducted crop demonstrations in harmony with the foregoing plan of "Safe Farming" in both wheat and cotton; in feed crops such as past experience taught would give best results; in food crops for family use and if conditions warrant for market (in the latter this was confined to Irish and sweet potatoes in the eastern counties of the district) and in orchards and small fruits.

Seed Selection. There has been a gradual interest manifest by the grower in seed selection through the entire district. The tendency on the part of the grower to seek not only pure seed but adapted seed is leading to a standardization in variety. The northwest counties have practically settled on Kanred and Black-hulled as the two best varieties of hard wheat to grow as demonstrations have shown these varieties to give a yield of four to five bushels per acre more than other varieties. Several seed farms have been established to furnish pure seed of these varieties to their respective territories. Acala No. 5 cotton has likewise proved to be a satisfactory variety of cotton to grow in the cotton counties of this district and has been selected by the growers as the one on which to standardize.

Soil improvement work is being given more attention each year as the farmers come to realize the necessity of maintaining the fertility of their soil if they procure a profitable yield and that the one cropping system is rapidly depleting the soil of its virgin fertility. Alfalfa and sweet clover are the principal crops used as legumes in a rotation system. A greater interest has been shown on the part of the farmer this year in these legumes both as soil builders and as pasture and hay crops.

More farmers are milking cows this year and the dairy cow is rapidly coming into favor with the small farmer. At no time has there been as great an interest in poultry and the dairy cow as now. There is an abundance of cheap food for both throughout the district this fall and the farmer who is prepared to utilize this feed is not worrying so much about the low price of wheat or the devastation done by the boll weevil. The great difficulty now is to provide suitable dairy cows to meet this demand.

Cimarron County.

Carl Andrew, the county agent, has been very active in procuring and disseminating better seed of the principal crops, encouraging the use of better sires and if conditions warrant, establishing purebred herds, in the control and eradication of livestock and plant diseases, and in the teaching of proper methods of preparation and soil culture, particularly the summer fallowing of land for wheat and spring crops.

Texas County.

J. B. Hisey, the veteran county agent, has done much to popularize home gardens and much credit is due him for the splendid showing in wheat yield for he has preached in and out of season the methods that are now largely in common practice that have made a wonderful record in wheat production.

Beaver County.

W. B. Hanly has done much to popularize the county agent work in this county. He has a splendid enrollment of enthusiastic club members and is developing a number of real swine breeders through his pig club work. The fair organization is making progress through his leadership and with the aid of the Beaver County Improved Breeders' Association, they have just completed a show and sale pavilion that would be a credit to a much older community. He has aided in the organization of several community organizations that have for their purpose the promoting of the community spirit of helpfulness; the building up of schools; the promoting of a more wholesome social life and the improvement of all farm activities.

Harper County.

E. A. Porter, county agent, has been instrumental in distributing pure Kanred wheat and that has brought to the growers thousands of dollars in increased yields. He is a leader in promoting the breeding of better livestock and in cooperation with the home demonstration agent, Mrs. Ida Sweet, has popularized poultry as a side line on many farms by teaching culling, feeding and selection of poultry. Many boys and girls have been launched into a profitable business through the poultry club.

Woodward County.

Fred R. Merrifield is county agent. He is the recognized leader in the county fair and county poultry show. It was largely through his efforts in working with the dairymen and public spirited citizens that the department in dairying was established by the Department at the Woodward field station. Club work has been exceptionally good; particularly is this true of the pig and poultry clubs. Club exhibits were the dominant feature at the five community fairs, the county fair, and the school district poultry shows that were held in such a manner that all school districts had an opportunity to participate.

Woods County.

W. D. Kenyon, county agent, has been active in disseminating knowledge among the farmers of the different methods of commodity marketing of farm products cooperatively; has practically standardized the wheat crop, using Kanred; has been

largely instrumental in the success of an improved breeders' association, which holds a show of purebred livestock each spring, and is largely responsible for the success of the county fair held at Dacoma.

Alfalfa County.

George F. Newton, the county agent, has aided very materially in the promoting of Kanred seed wheat farms, the source from which the seed is being procured to standardize the wheat production of the county. He has also aided the Oklahoma Wheat Growers' Association, of which Alfalfa county has a very large membership, in educating the farmer relative to the marketing of farm products as proposed by these commodity marketing associations. His club work in poultry and swine has developed many herds of swine and flocks of poultry.

Major County.

H. B. Binkley, county agent, has been instrumental in developing the dairy and poultry interests. The Farm Bureau has shipped, cooperatively, practically all of the livestock that has been shipped to market this year from this county. He has conducted demonstrations in varieties of wheat with the result that Major county is rapidly standardizing on the Black-hulled variety of hard winter wheat. Most all seed distribution is being done through the County Farm Bureau and the local Farmers' Unions of which they have several. Through his pig, poultry and dairy clubs he has created considerable interest in a "Live off the proceeds of the farm" program.

Grant County.

Grant county is the only county in the district that does not employ a county agent.

Garfield County.

M. C. Liebhart, county agent, began work August 1 and is carrying out the project already adopted by the County Farm Bureau as proposed by D. T. Meek, who resigned July 1. The boys club work was developed to a very high degree by Mr. Meek. Especially is this true of the breeding phase in beef cattle, sheep and hogs. The agent has been instrumental in developing one of the best county fairs in the district. At the five district fairs, the county fair and the two State fairs, club members of Garfield county made excellent exhibits that attracted wide attention. Through the boys wheat club the agent has been able to standardize the variety of wheat sown. Kanred wheat is grown on practically all farms.

Kay County.

L. C. Shelton, the county agent, has worked only a short time, beginning September 15, succeeding W. F. Gray, deceased. The fine results in livestock development can be traced to the activities of the county agent. It is said that Kay county excels in the number of standard bred poultry flocks on the farms and that this is due to the poultry club work of the agents.

Noble County.

S. E. Laird has been in this county for about nine years and holds the record of continuous service in one county. Mr. Laird is given credit for the splendid record made by the Improved Breeders' Association which organized several years ago with seven members owning 12 head of purebred cattle. They now have more than 200 members owning more than 2500 head of purebred cattle. The quality of these cattle has improved equally as much.

Pawnee County.

M. T. Maudlin, county agent, has done much to promote dairying by the average farmer as a means of meeting the current expenses of the family. He has been the leader in promoting the county fair, which has made a splendid growth; he has been instrumental in interesting the bankers and business men in the club work to the extent that any boy or girl who wishes may get the required financial aid in carrying out his or her undertaking. Particularly is this true of the pig and poultry club

work. This club work has placed well bred hogs and standard bred poultry on hundreds of farms where scrubs or none at all were kept before.

Payne County.

L. E. Rathbun, county agent, has been active in promoting a very progressive program for community building through the 16 or more local farmers' unions and a county organization. These local unions are very active in carrying out a program of community spirit of helpfulness, the building up of the schools, the promoting of a more wholesome social life, and the improvement of all farm activities. Poultry and pig clubs have done much in improving the quality of the poultry and swine of the county.

Lincoln County.

J. W. Guin, county agent, has promoted an improved breeders' association and the county free fair which have been instruments through which the improvement of all seed stocks have been carried on. Through field demonstrations Mr. Guin has succeeded in proving the superiority of various seeds. Silver Mine oorn and Acala No. 5 cotton are the varieties chosen on which to standardize. He has organized a county branch of the Oklahoma Cotton Growers' Association which has a large membership in Lincoln county. Club members from this county won more prizes than any other county in the State.

Creek County.

J. W. Riley, county agent, has succeeded in interesting many home owners in good livestock and there are now established some good breeding farms. His "living at home" program has caused a goodly number to keep a cow, a sow and some poultry who in the past lived on the production of cotton. The club work is developing character and good citizenship in many boys. The county and district fairs have been a means of aiding Mr. Riley in teaching the proper selection of seed stock in field crops, livestock and poultry. Through his efforts Silver Mine corn is becoming popular. He has succeeded in establishing seed farms of this variety sufficient to provide seed for those who wish a superior seed.

Okfuskee County.

E. A. Kissick, county agent, has done much in encouraging more food and feed with considerable success. There is quite an increase in the number of farmers who milk cows and maintain a good flock of chickens. His club work is unexcelled anywhere in the district and he has the hearty support for this work on the part of the teachers and the county superintendent. A good strong membership of the Oklahoma Cotton Growers' Association in the county has been secured through his efforts. He has an active agricultural advisory committee selected from the county cotton growers' association, county improved breeders' association, the farmers' union, the county teachers' association, and the chambers of commerce from Okemah and Weleetka. This committee met and adopted a county project of work for the county agent.

Conclusion.

In the discharge of his duties the district agent spent 231 days in the field and 86 in the office, made 131 visits to county agents, attended and spoke at 101 meetings with an attendance of 6427, and traveled a total of 21,798 miles.

SOUTHEAST DISTRICT

By T. A. Milstead

The entire fifteen counties comprising this district are located right in the very heart of the cotton territory of Oklahoma. The vast majority of the farmers of this section are tenants, many of whom are inoculated with that almost incurable disease "Wanderlust", and really seem to enjoy moving. There has been a general awakening of the bankers, merchants, and progressive farmers to the resultant evils of the one-crop system, which has so completely demoralized business in our great Southland, that they say they will never again stake their "all in all" on the treacherous staple

vs boll weevils but will stand united for a program of safe farming that will insure the farmer a sufficient number of cows, hogs and chickens to furnish his family with plenty of milk and butter, meat and lard, chickens and eggs and a surplus to sell to keep a little cash coming in each week, and the planting of enough food and feed crops for the family and livestock and the planting of an acreage to cotton that can be cultivated and picked without any hired help.

Free Fairs.

The free township and county fairs in the southeast district are growing more popular each year as is evidenced by the demand of the farmers for increased appropriations for the fairs, and last but not least the keen rivalry and competition between the school districts, the townships and the counties for the first honors. Thirteen of the fifteen counties in this district held free township and county fairs this fall and judging from the improvement of exhibits over those of former years, the fairs are a strong incentive for better seed, fruit and livestock.

County Agents.

The agents of the southeast district as a whole are well qualified, keen and alert to the needs of their respective counties. They are trying to correct the existing evils of inferior seed, low grade stock, erosion of soils, market problems and tenantry by practical concrete demonstrations in the selection of field seed and cultural methods, cow testing associations, terracing and drainage, and by the organization of civic and commodity marketing associations.

Atoka County.

Cotton has always been the main crop planted and up to this year was the main crop from the standpoint of production but on account of boll weevil this year, it was almost a complete failure as is evidenced by November, 1920, gin report of only 856 bales. A. E. Cook, the hard working county agent, has given much valuable aid to the farmers and works cooperatively with a committee of 15 farmers for the general advancement of agriculture, poultry and dairying. With the aid of his co-workers he held two very successful township fairs and a splendid county fair that did much to interest the farmers in better seed and livestock.

Bryan County.

Cotton is, or rather was, the principal crop in Bryan county up to the advent of the boll weevil which was the leading factor in reducing the yield of the crop this year down to 2700 bales as compared to the normal yield of about 36,000 bales. G. B. Dunlap, the county agent, works in perfect harmony with the agricultural committees of the following organizations: Livestock Breeders' Association, Cotton Growers' Association, Farm Labor Union, Bankers' Association and the Chamber of Commerce. No project is started in the county without first being discussed with the different committees on agricultural work and thorough understanding reached before the work begins. Mr. Dunlap, with the assistance of the agricultural committeemen, is now engaged in a campaign to try to teach the cotton farmers of Bryan county how to care for and make money from the few cows they have. Several farmers have already bought cream separators and are so well pleased with their weekly cream checks that they have pledged themselves to milk more cows and patronize the new cream station that was established recently at Durant as a direct result of this campaign.

Coal County.

The county agent, W. T. Yoakum, who with the exception of a few months spent in Pittsburg county as county agent during the war, was on the job from 1915 until November, 1921, when he resigned to enter the business of farming and stock raising on his own account. M. W. Plettner succeeded Mr. Yoakum as county agent, and seems to be getting hold of the job like a veteran county agent.

Choctaw County.

J. A. Wyatt served this county for six years as county agent and did much constructive work in inducing the farmers to plant improved seed and getting them to

secure purebred hogs and chickens. He resigned October 15 to enter the farming and purebred hog business on his own account. Frank C. Higginbotham, the present agent, has been on the job three weeks, one of which was spent in Texas with one of the progressive bankers of Hugo buying a car of high grade Jersey cows to be resold by all the bankers of Hugo to some select customers under an agreement that they would properly pasture, feed and milk the cows. These cows were sold in groups of five to a farmer in the hope that he would have enough cows to justify him to handle them in the latest approved way.

Haskell County.

The day never gets too cold, hot or wet, nor the night too dark for John L. Schad, county agent, to answer the many calls of both rich and poor for assistance with their many farm problems as well as some of the more pressing problems of the poorer class. Mr. Schad is a firm believer in fairs and is directly responsible for the good township and county fairs held in the county. He is doing some splendid work in soil building by inducing the farmers to plant corn and legumes in alternate rows.

Hughes County.

T. A. Vanderpool, the county agent, has been on the job morning, noon and night since the summer of 1918 and is very fortunate in having the full cooperation of the agricultural committees of the farmers' union, county free fair association, cotton growers' association, and the lions club of Holdenville. Mr. Vanderpool and the above committees were among the first in the State not only to realize the danger of the one crop system but started out to correct it by inducing worth while farmers to milk more cows and grow more poultry. The poultry industry has grown from a few crates shipped by the merchants to two big competitive dealers that ship many cars of poultry and eggs.

Latimer County.

N. C. Ward, the county agent, with the cooperation of the more progressive farmers and business men, has built up a strong interest in their county fair which has done much to stimulate a desire for the best in seeds and stock.

LeFlore County.

H. W. C. Shelton was agent in this county for several years and did much good work in getting the farmers to plant better seed, especially cotton and corn. He resigned July 1 to again enter the profession of teaching. There was a complete change in the personnel of the board of county commissioners on July 1 and one of their first official acts was to vote "No" on the appropriation for the continuation of farm and home demonstration work.

McIntosh County.

H. L. Bankhead, the efficient county agent of this county, is backed up by the farmers union, McIntosh county farm clubs, federal farm loan association, Oklahoma cotton growers' association, and the lions and other civic clubs of the towns of the county. Mr. Bankhead is a firm believer in soil improvement and has conducted several demonstrations in growing legumes, liming soils and the proper use of commercial fertilizers. He is also an untiring worker for more and better dairy cows and through his demonstrations of proper feeding and the use of the Babcock tester he has taught many of the farmers how to detect the "star boarder" and was responsible for 42 farmers buying cream separators.

McCurtain County.

A. L. Edmiaston is just completing his second year as county agent. He has the support and full cooperation of the farmers' union, cotton growers' association, truck growers association, and county bankers' association. Mr. Edmiaston was instrumental in getting eleven farmers to buy cream separators and in the establishment of two cream stations.

Pontotoc County.

J. B. Hill, the veteran county agent, preaches from several simple practical texts but has a preference for his old favorite which he dubs the three "F's", which mean "Food and Feed First", not only for the cotton farmer but all farmers. Mr Hill is a strong advocate of sweet clover as a soil builder and pasture crop and is responsible for the many hundred acres of sweet clover in the county, which has had much to do in making the county famous as one of the leading bee counties of the south. He is also responsible for the hundreds of acres of corn and legumes grown in alternate rows for "hogging down" and improving the soil. The county agent's office of this county has the active cooperation of the farmers' union, cotton growers' association, free fair association, chamber of commerce and all of the daily and weekly papers of the county. Mr. Hill and his co-workers are waging an intensive campaign for more milk cows on the farms and have created enough interest to justify the establishment of five cream stations.

Pottawatomie County.

Edwin R. Henson was county agent in this county for two years and did much constructive work, especially in getting farmers to realize the value of purebred stock and in inducing them to purchase good sires to improve their grade stock. He resigned September 15th and H. G. Ware was appointed as his successor.

Pushmataha County.

George Innes, county agent, has always been an apostle for food and feed crops and home ownership and no doubt has induced more tenant farmers to buy homes than any man in the southeast part of Oklahoma. He is also a good strong advocate for organization and is in a very large measure responsible for the farmers' union and cotton growers association in the county. There are many thousands of acres of "free range" in the county where horses, cattle and hogs roam at large, which makes it very hard to control livestock diseases, especially hog cholera which kills many hundreds of hogs annually. Mr. Innes has taught several men how to vaccinate cattle and hogs and is determined to keep at the job until the county is free of hog cholera and blackleg is reduced to the minimum.

Pittsburg County.

E. B. Nelms, the county agent, has a decided leaning toward the general improvement of livestock and has done some splendid work in trying to teach the average farmer how to properly care for his livestock. The farmers' union, cotton growers' association, and the commercial club of McAlester have always been boosters and cooperators of our extension service and can be counted on to get behind and push for all meritorious projects that stand for the agricultural development of their county. Pittsburg county has one of the best county fair plants in the State and generally holds a fair that would be a credit to any county.

Seminole County.

H. G. Howard, the county agent, is a hard worker and is gradually getting the farmers not only to realize the need of better seed and livestock but was successful in getting the bankers of Wewoka to buy four cars of Acala cotton seed which were sold to farmers at cost. Mr. Howard has the cooperation of the farmers' union and cotton growers' association and is at present engaged in a terracing campaign which will redound in much benefit to the hilly, washy soils of the county.

Conclusion.

In the discharge of his duties the district agent made 189 visits to agents, 30 visits to demonstration plots, held 74 meetings with an attendance of 6313, traveled a total of 20,606 miles, spent 222 days in the field and 88 in the office.

NORTHEAST DISTRICT

By G. W. Vincent

The northeast district is made up of the following counties: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Nowata, Okmulgee, Osage, Ottawa, Rogers, Sequoyah, Tulsa, Wagoner, and Washington.

Agriculturally speaking, this region has never been intensely cultivated or hardly gotten out of its virgin state. A few years ago when this country, which was known as Indian Territory, was annexed to the State of Oklahoma at the beginning of statehood, a part of the land became deedable and was sold from the original allottees to people who came from almost every state in the Union. Some of the counties were more thickly settled with an influx of people from the states than others, nearly all of whom purchased the land making a substantial initial payment on the same and mortgaging the land for the remainder of the purchase price. During the war period a considerable amount of this territory changed hands at highly inflated values which were the result of increased prices of farm products and the ever prevailing opportunity to lease the acreage for oil and mineral products at from \$1 to as high as \$100 per acre.

This oil industry, in all but some three or four counties, has in a way diverted the attention of the land owners themselves and especially the renters from farming interests to employment in the oil fields and to speculative opportunities held out by oil development and with all the pressure that has been brought to bear from an agricultural standpoint, I am forced to report that there has been a great deal of neglect and lack of attention on the part of the farm people and as a consequence of this the great drop in prices of farm products as well as the increased reduction in the price of oil and the ever descending demand for oil leases, has caused an unusual depression throughout this district.

The rental system has been one that is very difficult to deal with and one on which the county agents have brought a great deal of stress to bear in nearly every county. The poor grade of improvements, which are furnished on the average farm, has caused an undesirable class of renters to stop in this region and they have not proved a very desirable class of people with whom to carry on demonstration work. We feel very much gratified over the fact that we have had but few changes in county agents during the last twelve months.

Adair County.

G. E. Davis, by very forceful initiative tact, has induced the citizenship of this county to see the error of their way in trying to raise general farm crops and has led them into a movement for fruit production which has reached to all parts of the county. Out of his efforts in the past year and a half has grown a branch of the Ozark Fruit Growers' Association, the membership of which has planted in the past year more than 2000 acres of strawberries, have worked over and renovated some 600 acres of apple orchards and set out over 500 acres of new apple orchard in that county. There is also a strong sentiment for grape production and a number of acres of grapes have been set in cooperation with the movement which is on in the northwestern counties of Arkansas adjoining Adair county. Mr. Davis has also stirred up quite an interest in dairying and poultry production and is at the present time laying his plans for a county wide campaign along these lines.

Cherokee County.

Cherokee county has been without a county or home demonstration agent for the last two years, having had about three months service of an emergency agent during the war and the interest in our work has run down considerably. We have made some eight or nine visits this year conferring with interested citizens, the board of county commissioners, the excise board and others interested in our work and am very proud to report that we have secured an appropriation of \$120 per month beginning October 16, 1921, and have employed J. F. Riddell, who was formerly county agent in Kay county. Mr. Riddell is now on the job and is laying his plans for a good line of work the coming year.

Craig County.

G. E. Thomas was county agent in this county for seven years and four months, having resigned his position July 5, 1921, and we have never been able to get the county commissioners to appropriate funds for the work since Mr. Thomas resigned.

Delaware County.

Delaware county has never appropriated funds for a county agent. There has never been an agent in the county except for about 18 months during the war period and he was supported solely by emergency funds.

Mayer County.

C. R. Jackson is now working his second year in this county and has given very general satisfaction. The county is paying \$120 a month on his salary and gives him \$300 per year expense money. One of the brightest features of his work is the fact that he has secured a membership of 100 fruit club members besides a heavy enrollment in the pig and calf clubs; these fruit club members have from one-fourth to one-half acre of strawberries each under their care at their respective homes.

Muskogee County.

Muskogee county is one of the very difficult counties in this territory to handle. A year ago it was being served by J. M. Daily, who was formerly district agent of this territory. He resigned early in 1921. R. C. Moore, former county agent in Pottawatomie county, succeeded Mr. Daily but owing to conditions arising in the county he resigned the work after two months' service. We finally secured the services of J. M. White who took up the work March 1, 1921. Mr. White has been very diligent in his services and has secured the very closest cooperation of farmers and business men in the city of Muskogee and in all the smaller towns of the county until I am glad to report that there is now a better feeling toward the demonstration work in Muskogee county than I have ever seen there. Through the cooperation of the bankers Mr. White has distributed 22 head of purebred Jersey heifers to his dairy club members. Together with Miss Mabry, the very able home demonstration agent, they have held poultry shows in every school house in the county. He had a very creditable county exhibit at the State fair at Oklahoma City and at the Free State fair at Muskogee. The county's share of Mr. White's salary is \$230 per month.

Nowata County.

H. M. Wolverton has been our agent in this county for about six years. He has worked up a very keen interest in improved breeding of livestock and has at the present time a movement on foot for a cooperative market for dairy products in Nowata. He has assisted the farmers in organizing some five cooperative grain marketing concerns and elevators and has the support of the best people in the county. He is in very close touch with all the different organized efforts of the county and is making a good showing for our work in all sections of the county. The county contributes \$95 a month to Mr. Wolverton's salary.

Oklmulgee County.

D. P. Trent has distributed a great deal of good seed corn and seed oats to his demonstrators and club members, has put out about 100 purebred gilts to club members and has settled for them with the bankers or has assisted the boys in settling. He made a very creditable showing in the cotton growers' organization, has assisted a number of good men in securing homes in the county and seems to be giving the very best satisfaction generally. The county is contributing \$135 per month to Mr. Trent's salary.

Osage County.

S. M. McCuiston by his very able generalship has been instrumental in doing a very effective work among these ranchmen, stockmen and full blood Indians. His annual report shows both in word and picture the results of his year's work to be very profitable and I find him today one of the busiest men in that county. The county very generously supports Mr. McCuiston, paying \$175 a month on his salary, furnishing him a good automobile with all upkeep, as well as good office accommodations. His services are in every way satisfactory.

Ottawa County.

Mr. James Lawrence, who has been in the county some three years, has thoroughly established himself with the people generally, both the farmers and business men, and is commanding more respect and cooperation as time passes by. He has done a great deal of good work with his club members and most especially the calf and pig club work and has worked up more than an ordinary interest in the poultry work throughout the entire county. The county is very well satisfied with Mr. Lawrence's services and supports him by contributing \$150 per month to his salary. We consider Mr. Lawrence in every way very dependable, sturdy and reliable and believe he is equal to the task in Ottawa county.

Rogers County.

Rogers county failed to make the appropriation this year for county and home demonstration agent work.

Sequoyah County.

Mr. Fred Ingram, the agent, has done his very best to carry out the work and has succeeded in effecting some real good club work as well as assisting along the lines of cooperative marketing of potatoes, vegetables, and cotton, which is the principal crop of the county. The county contributes \$150 a month to Mr. Ingram's salary.

Tulsa County.

J. S. Malone, the agent, has been in that service four years and is very strongly entrenched with the progressive element of the county. The entire county is very high in the praise of his efforts and the same is reflected in the generous support that they give him in contributing \$180 a month to his salary, furnishing him an automobile with all up keep and adequate office facilities.

Wagoner County.

C. M. Hubbard is now going into his fourth year in this county. He has received generous cooperation, having encountered a number of difficulties since he has been there. Just prior to the war he accepted a position as captain in the Oklahoma national guards which organized in that county and the authorities in the State have refused to accept his resignation. We feel that this has interfered with his services and will continue to do so more than anything else with which he has come in contact; however, the county is contributing generously as they pay \$162.50 per month on his salary.

Washington County.

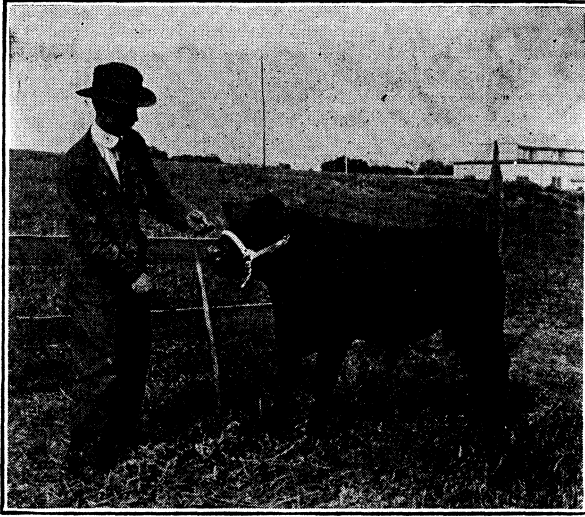
C. C. Porter is now serving his second year in the county. The county is contributing \$125 a month to his salary and his showing this year is a great improvement over last year's service both in demonstration and club work, as well as having done good work along marketing lines.

Fairs.

In addition to my regular work as district agent, I have devoted considerable time and attention to fair work the past year. I served as chairman of a committee to assign judges from the Extension Division to all the county fairs in the State. This has taken considerable time in conferences and in studying the different people suited to the different counties to which they went to put on this work. I assisted in judging livestock and agricultural products at the county fairs in Ottawa, Craig, Marshall, Wagoner, Woods, Texas and Cimarron counties this year. This work entails considerable hardship on those who are assigned to keep up with it but I am sure it is very educational and beneficial to those cooperating with our work in the different counties and to the people.

Cooperation of County and Home Demonstration Agents.

I am glad to report good indications of better cooperation between the county and home demonstration agents working together in counties in this district. The work has been of such a nature in Tulsa and Muskogee counties up to the beginning of this fiscal year that it was hard to keep both county and home demonstration agents



Curtis Floyd and his grand champion calf. Third in open class sold for \$600. The boy is now attending the A. and M. College on the scholarship won in State Board of Agriculture contest.



A delegate meeting of club members and supervisors from 21 clubs of Payne county held at Stillwater on February 25, 1922. Held for the purpose of studying club work.

lined up on strictly cooperative lines. I feel confident of our agents rendering a great service, which in my judgment will be more valuable the coming year than it has been for several years past throughout this district.

I am sure that the greatest job of the district agent is to keep good men on the job as county agents in the different counties. There is no other one thing that can be done by a district agent that will do more to build up his district than to be careful in the selection of men who are to be county agents.

In the discharge of my duties as district agent, I spent 196 days in the field and 104 in the office, traveled a total of 17,943 miles, addressed 74 public meetings with a total attendance of 9,199, made 131 visits to county agents and 15 visits to demonstrations.

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BOYS CLUB WORK

Project No. 4

At the beginning of last year those in charge of the boys club work in Oklahoma were E. B. Shotwell, leader; Phil H. Lowery and Ward Chase, assistants. During the year Mr. Shotwell, wishing to be relieved of so much field work, resigned as leader and was made assistant in charge of club office work. Mr. Chase resigned to take-up Smith-Hughes teaching work. Mr. B. A. Pratt of the State Normal at Ada was appointed State boys club leader.

The same general plan of work has been continued in enrollment, organization and general supervision. The following is the list of boys' club activities: corn, cotton, fruit, small grains (wheat, oats, barley), grain sorghums (kafir, milo, etc.), pig (fattening and breeding), poultry (first, second and third years), beef breeding, peanut, potato (Irish and sweet), crop rotation, sheep, bee, dairy and calf fattening. There were 5596 enrolled in the corn club, 1138 in the cotton club, 1492 in the peanut club, 1714 in the potato club, 981 in the small grains, 676 in fruit club, 1920 in grain sorghum club, 75 in crop rotation, 781 in pig fattening, 3959 in pig breeding, 9875 in poultry clubs, 214 in bee club, 382 in the calf fattening club, 377 in the calf breeding, 255 in the dairy club and 195 in the sheep club. The fattening phase of the calf and pig club work articulates with the Southwest Fat Stock show at Oklahoma City. The feeding contest for calves begins November 1 and for pigs December 1 and continues until the Fat Stock Show in the spring usually early in March. The following are the results of the 1921 fattening club contest.

No. entries in pig club	167	Increase over previous year	100
No. entries in calf club	305	Increase over previous year	274
No. prize winners, pig club	77	Increase over previous year	44
No. prize winners, calf club	85	Increase over previous year	63
Amount won in pig club	\$700.00	Increase over previous year	\$400.00
Amount won in calf club	\$800.00	Increase over previous year	\$485.09
Total winners, both clubs	162	Increase over previous year	107
Total amount won, both clubs	\$1500.00	Increase over previous year	\$885.09

During the fat stock show there was held a two-day school and stock judging contest at which 135 club members were present and took part in the judging.

METHODS OF INSTRUCTION

The club members have been aided in their work by personal correspondence, by bulletins, The Extension News and by the personal visits of teachers, county agents, club agents and supervisors. Instructions were given at club rallies and short courses in seed bed preparation, seed selection, grain and cotton judging, poultry raising, livestock judging and stock feeding, as well as handling and caring for tools. At all these meetings the social element was recognized and healthful amusement was provided. Short courses, rallies and other club meetings were held in every county in the State having a county agent, at all of which the club force took an active part. In all, the three club agents attended 352 different meetings with a total attendance of 50,180. In carrying out this work the club force made 354 separate visits to county agents and traveled a total of 45,783 miles.

Oklahoma Bankers Boys and Girls Clubs Scholar- ship Winners



ESTHER TENNYSON,
Foyil, Okla.



ALTA SUE BROWN,
Garvin, Okla.



FLORENCE HIERONYMUS,
Pond Creek, Okla.



WHEELER OLIPHANT,
Chandler, Okla.



MARGORY ROWE
Asher, Okla.



WILLIE MORGAN,
Pryor, Okla.



CARL COLVIN,
Roosevelt, Okla.



ROY SNYDER,
Douglas, Okla.



LON MURPHY,
Coalgate, Okla.

The above group of young people are the boys and girls club winners of the Banker Scholarships to the A. and M. College, who are attending College for the year 1921-1922. There are five banking groups in Oklahoma. The bankers of each group finance a scholarship for one boy and one girl to the amount of \$200.00 each for one year. Group one finances one to the College for Women which leaves nine to come to the A. and M. College.

Motto: Make the Best Better Through Education.

Five scholarships of \$200 each were given by the State bankers' association to the highest scoring club boy in each of the five banking districts in the State. The cotton seed crushers' association also gave a \$160 scholarship in the A. and M. College to the highest scoring boy in the State in cotton club work. The winners of these scholarships in 1921 are now in the A. and M. College and making good records. Many of the winners of these scholarships in previous years are now in College and are maintaining themselves as an outgrowth of the club work. A recent poll of the students of the A. and M. College shows that from 1097 students reporting, 28 had won scholarships in the A. and M. College through club work. This poll also showed that of those now in attendance, whose homes are in the country, one-half of them had been club members.

Fine cooperation has been had with the public educational system of the State. Members of the club force have at different times explained the club work to the teachers attending the State normals that they might understand how the club work is carried on and be in a position to better cooperate with the county agents in helping with the work in their counties. County superintendents of education are becoming more interested in correlating the club work with that of the schools and are requesting that club work be discussed before county teachers' associations, either by the county agents or some one from the supervisory force at the College. The fullest cooperation of the State superintendent continues and he is urging upon county superintendents and teachers of the State the fullest cooperation possible. Students in the common schools of the State are given credit on their eighth grade examinations for club work completed.

A short course for the first prize winning club boys at county fairs was held at the State fair at Oklahoma City, September 27-29, inclusive. 225 boys were in attendance at this school. A short course for the second prize winning club boys at county fairs was held at the Free State fair at Muskogee. There were 75 boys in attendance at this school. The expenses of conducting these schools and taking care of the boys were paid from a State appropriation for that purpose. At the close of each of these two State fair schools, a contest was held in judging grain and livestock and as an outgrowth of this a team was selected to represent Oklahoma at the International livestock show at Chicago. Funds were donated to finance this trip by the various packing and other stock companies at Oklahoma City. The boys winning this trip were as follows: Ira Hollar, Garfield county; Clarence Broyles, Payne county; Harold Gould, Major county; Ford Mercer, Lincoln county; Noel Jones, Ottawa county, and Marvin Solomon, Stephens county. They were accompanied by B. A. Pratt, State boys club agent.

At the State Fair at Oklahoma City premiums amounting to \$2926.00 were offered for boys club work. There were also special premiums to the amount of \$738.00. At the Free State Fair at Muskogee the regular premiums for boys club work amounted to \$2491.00 and special premiums amounted to \$815.00 the total value of scholarships to State schools amounted to \$1500.00. The amount of premiums offered at township and county fairs amounted to \$27,026.00, making a total of \$35,496.00 available for boys club work in this State. Several counties failed to report on township and county fairs or the total amount would exceed the above total considerably.

Club work is carried on among negro boys along the same general lines as the whites. There are nine negro agents in the State who are supervised by a negro district agent. In counties where there is no negro agent, the white agents are enrolling some of the negro boys.

The boys and girls club work is becoming more and more popular throughout the State and the enrollment for the next year's work is progressing rapidly. The outlook for the coming year is all that could be desired.

HOME DEMONSTRATION WORK

Project No. 5

During the year 1921 the home demonstration force consisted of 40 county home demonstration agents, four district agents, a food specialist, a clothing specialist,

and the State home demonstration agent in charge of the work. They also were assisted by a specialist in poultry, dairying, horticulture, rural sanitation and necessary stenographic help. During the first half of the year the field work was supervised by two district agents and two assistant district agents. Later the State was redistricted and the two assistants given entire charge of a district.

In the discharge of their duties the supervising force worked a total of 1053 days in the field and 676 days in the office, visited 193 demonstrations, attended 941 meetings with a total attendance of 105,274, made 530 visits to county home demonstration agents and traveled a total of 78,480 miles by rail, and 12,476 miles by automobile.

Four district conferences for home demonstration agents were held; the first at Muskogee March 8 and 9, the next at McAlester, the third at Oklahoma City and the fourth at Enid. Two days were given to each conference and the agents were expected to attend the one nearest them. The colored home demonstration agents also attended these conferences. The annual home demonstration agents' meeting was held at Stillwater August 24-31, inclusive. All the home demonstration agents attended this meeting.

An effective campaign was begun in January, 1921, to increase the use of milk and milk products as food, especially for children. This campaign was carried on in 24 counties. The leader reports 424 schools taking part and 15,207 children bringing one pint of milk to school as a result, while 5463 families are using more milk as a result of it.

ADULT HOME DEMONSTRATION CLUBS

Programs were printed by the Extension Division providing for four years study for the home demonstration clubs. These clubs have a four fold aim in organization; to raise the standard of home life, to introduce better methods and practices in home making, to dignify the profession of home making and to advance community interests and life. The programs provide for instruction and discussion on all phases of home making, including food, nutrition, clothing, shelter, management, thrift, beautification, sanitation, health and welfare. In all there are now approximately 150 clubs with an enrollment of 2200. There are county federations in 10 counties and three of these county federations have joined the State federation of women's clubs.

Boys and girls club work is usually carried on by the home demonstration agent and the county agent in conjunction. If there are 10 members in the club it is granted a charter by the A. and M. College. Meetings are held regularly once a month and one or both of the agents try to attend. Every home demonstration agent has girls enrolled in every form of girls' club work and a number of girls are in boys clubs as well. The heaviest enrollment is usually in poultry, about 60% of the poultry club members being girls. In all lines of work there are 908 clubs for white girls and 149 for colored, making 1057 in all. During the year there have been 5581 girls in canning and sewing clubs and this with 60% of poultry (5829) makes an enrollment of 11,410. Besides this there are 1662 colored girls, giving an enrollment of 13,072.

Thirteen club camps, varying from two to four days, were held during the year. The largest of these was in Carter county which was attended by 400 children. The home demonstration agents report holding 24 club rallies for white girls and 11 for colored girls. These rallies are designed for the purpose of bringing together all the club members in a county with their supervisors and the agents and as many parents and friends as care to come. Usually some one from the Extension Division of the A. and M. College also attends and assists with the program.

The home demonstration agents report 5570 poultry club members and 1212 adult poultry demonstrators. This means those persons working on the poultry project under the home demonstration agents' care. Reports have been received from 2472 girls and 578 women. These reports show a return in dollars and cents of \$9712.37 for girls and \$129,698.83 for women for chickens and products sold. Also a value of \$14,187.44 for girls and \$48,825.34 for women in chickens and products used at home. The colored agents report 197 poultry club members and 132 adults,

only 140 of whom have reported. They report \$1164.60 worth of chickens and products sold and \$1834.00 worth used at home. This gives a grand total of \$140,575.20 brought into the family income through the sale of chickens and their products. There are many stories in the agents' reports that show how whole families have been helped from poverty to a comfortable living by the helpful hen.

Altogether the white women agents report 202 food demonstrations and the colored agents, 399, giving a total of 601. Canning is an important phase of food work that has not been neglected. During the year a total of 1106 canning demonstrations are reported by the agents. This year shows a total of 539 pressure cookers purchased. There are 4981 garden demonstrators enrolled of whom 4089 are white.

The sewing exhibits at the fairs were larger and better than ever before. The girls' canning club exhibits were very fine, having grown 75% in four years, from four team exhibits to 15 the present year. There was an improvement in quality as well as quantity. The farm women's club exhibit at both State fairs was a splendid one. At Oklahoma City 16 counties exhibited 36 jars each and at Muskogee 10 full exhibits were made.

Schools for prize winning club members were held at both State fairs. At Oklahoma City there were 107 girls and 229 boys and at Muskogee there were 52 girls and 73 boys. These fair schools have their own permanent housing quarters on the fair grounds.

Nine scholarships in the A. and M. College valued at \$200.00 each were awarded by the Oklahoma bankers to the highest scoring boy or girl in club work. The Montgomery Ward company gave a \$200.00 scholarship in the A. and M. College to the girl making the highest score in canning club work. This scholarship was won by Miss Vesta Armstrong of Custer City. The four girls who won bankers' scholarships were Florence Hieronymus of Pond Creek, Beatrice Cornett of Pawhuska, Alta Sue Brown of Idabel, and Esther Tennyson of Foyil.

The total enrollment in all lines of work in the home demonstration and girls club work for 1921 was girls 10,755 and women 4,124.

CLOTHING SPECIALIST

The clothing work since August 1st has consisted of preparing the outlines and a part of the lessons for the four-year course for sewing clubs for girls; also planning the clothing short course for women and carrying out the plan in several schools. It is through the farm women's clubs that this work may be accomplished. Each club has the privilege of selecting for its leader one of its members who should have a practical knowledge of sewing and who should also have the ability to instruct others. These leaders attend the five-day short course held at some central location in the county, which is conducted by the clothing specialist. Each leader goes back to her club and gives the information she has gained. The course is planned with the idea of holding these short courses for three or four years in succession in each county giving more advanced work each year. So far such schools have been held in four counties with most of the farm women's clubs from each county represented. In these schools 44 dress forms were made and 42 dresses. The purpose of this short course is to teach how to choose clothing that is becoming as well as practical and also to teach in the five days' time as many of the principles of dressmaking and best methods of sewing as possible.

NUTRITION SPECIALIST

During the year Miss McPheeters has been engaged chiefly in the supervision of adult home demonstration clubs and the supervision and promotion of nutrition work. She attended 22 supervisory conferences and also attended 102 meetings bearing directly upon the work, short courses, visiting and organizing home demonstration clubs, community meetings, farm women's county federation meetings, teachers' meetings, etc. At these meetings she gave 14 demonstrations and 95 talks, 75 of them being on nutrition. During May and June she prepared programs for home demonstration clubs, secretary's record book for clubs, lessons on nutrition, home management and home beautification for adult demonstrators. Later in the summer she planned milk campaigns and prepared literature and charts for same.

The nutrition work for the year has been carried on largely through nutrition classes and milk campaigns. Some hot school lunch work has been done. Many nutrition talks have been made before home demonstration clubs and girls clubs.

A nutrition institute was held in Oklahoma City last December under the direction of Mrs. Gertrude Gates Mudge, supervisor of nutrition work, New York county, New York. The object of the institute was to train workers in methods of organization and the technique of nutrition classes. Mrs. Mudge was assisted by the State home demonstration force of the A. and M. College and Miss Efafe Brown of the southwestern division of the American Red Cross. The institute was financed by the southwestern division of the Red Cross, Oklahoma county chapter, A. R. C., and the Extension Division of the A. and M. College.

Those registered for the work were public health nurses, home economics teachers and home demonstration agents. 14 home demonstration agents were in attendance.

The home demonstration agent chooses a locality where she knows a good deal of malnutrition exists and forms a class of the under-weights, (7 percent or more underweight) 10 to 20 in a class. The class meets for one hour once a week. A local doctor gives the physical examinations. Parents are informed in regard to the child's physical condition and urged to have physical defects looked after. The children are weighed each time and their gains or losses recorded on their weight charts. At each meeting they are given definite nutrition instruction, also health talks on health and hygiene. If there is a county public health nurse, she and the county home demonstration agent work together in conducting these classes, the home demonstration agent giving the food talks and the nurse giving the health talks. The mothers are urged to be present at each meeting. It usually takes from two to three months to finish a class. All of the home demonstration agents without exception, who conducted nutrition classes have said that the work was received very enthusiastically by both children and parents.

Ten home demonstration agents conducted classes. There were 20 classes with 480 enrolled. 25 had physical defects which were corrected. 375 made good gains, 198 of them coming to normal weight. There were 6 outstanding cases, one of which came up to normal weight. Two were tubercular but both made good gains; two others made good gains but had not reached normal weight when the classes were discontinued. One made no gain due to physical defects not being corrected.

MILK CAMPAIGN

The first milk campaign was started in January, 1921. (1) To teach the importance of milk as a food. (2) To increase the use of milk per individual, especially by children. (3) To increase production to the extent that it will be adequate for home use.

The milk story was told to the children and they were asked to bring a pint of milk to school each day for a certain period of time—not less than six weeks. The teacher kept a record of those using milk at school and secured other important data as she could. The milk story was told not only to the children in the school but to as many groups of adults as possible.

Milk campaigns were carried on in 24 counties, 424 schools taking part. 15,207 children used one pint of milk each at school per day. 8717 children used in addition one pint per day at home. As a result of these campaigns, 5463 families were using more milk in the diet.

SOUTHWEST DISTRICT

While the redistricting of the State occurred July 1st a district agent was not appointed until August 1st in the Southwest district. There are 11 counties in this district but there are only four demonstration agents in it. These agents are in Custer, Greer, Kiowa and Tillman counties. The report which follows covers the year's work in these counties. However, it would be exceedingly difficult in many of the projects to separate that which belongs to the first part of the year from that which comes since August 1st and so the report is based upon the annual reports of these four home demonstration agents.

The only campaigns held in this district have been in milk work excepting a "Swat the Rooster" campaign held by Miss Blair in Custer county. Mrs. Condon reports that due to the milk campaign in Greer county 40% of the school children are bringing milk for lunch. Tillman county reports 47 schools serving milk for lunch thereby benefitting 1410 children. In Custer county an educational milk exhibit was put on in the county fair by the home demonstration agent. As a result the agent reports three men as buying cows for family use, and since there are a number of homes without a cow and others without milk a milk campaign will be put on in Custer county in the near future. Miss Huffer of Kiowa county says the milk campaign work carried on in her county is showing itself to be very profitable. In her "Swat the Rooster" campaign Miss Blair reports that all the merchants in the county cooperated with her and culls were marketed from 3 to 5 cents above market price. A day was set aside for this purpose called "Rooster Day." She assisted in culling eight flocks (150 hens each). The number of culls ran from 33 to 75. Mrs. Peck's flock of 235 hens after culling produced as many eggs as before culling.

While it cannot correctly be called a campaign, Mrs. Condon reports what she calls a wild black currant campaign. After the demonstration at Clinton by Dr. Lund and Mrs. Frazier which she attended, Mrs. Condon says she made it her business to mention black currants everywhere she could. As a result of her activity 16 women in her county transplanted currant bushes from the mountains to their gardens.

The members of the force in this district have borne their share of the work of judging fairs. The district agent had charge of the sewing exhibits for club girls at the Oklahoma State fair at Oklahoma City and at the Free Fair at Muskogee. She also acted as judge of these divisions. Miss Blair served as judge for three counties and Mrs. Mosteller for one. The agents in this district report a decided improvement in the county fairs this year, not only in point of quality but in interest also. Only one county in this district having a home demonstration agent held a county fair but 44 community exhibits including poultry shows were held where 306 club girls made exhibits and in which 236 received awards. Fifty-three girls made exhibits at State fairs and 18 of them received awards.

Out of the seven possible scholarships open to club girls in the State one of the girls in this district, Vesta Armstrong of Custer City, Custer county, won two.

Club work for women in the Southwest is the vitalizing force back of the home demonstration agent. Mrs. Mosteller says the two home demonstration clubs combined into a county organization is the strongest force in her county for home demonstration work. She says further that her women's clubs, of which she has 11 with a membership of 169, are doing worth while things and that their exhibit at the county fair was an eye-opener showing what organization coupled with training will do.

Miss Huffer has recognized what a power her women can become for she has divided her county into eleven centers and has clubs organized at each, though she has reported those from only nine where she has 150 women enrolled. She uses these clubs as a means of reaching as many women as possible as she meets with each club each month and has for them some special lesson. Mrs. Condon in Greer county has only two women's clubs with a membership of 32, but she works through evening meetings for parents and pupils at consolidated schools in much the same way. Miss Blair in Custer county has only two farm women's clubs organized with a membership of 13, but she has a number of groups of women ready to organize. Thus from these four agents we have 26 organized groups and 24 reported 364 members.

Nor has interest in the women's clubs caused the agents in this district to overlook the girls. In Kiowa county there are girls clubs organized in each of the 11 centers and the agent has an enrollment of 251 girls. She met once each month with these girls. From Tillman county our home demonstration agent sends this comment regarding the girls club work. "While not so many girls did club work this year as last, their products were better in quality, including canning, sewing and poultry. Those who had best work at county fair also won on what was exhibited at the State fair at Oklahoma City and the free fair at Muskogee." Mrs. Mosteller has 120

girls enrolled in her poultry clubs and tells us that the club girl making the most profit in poultry cleared \$94.

In Greer county the home demonstration agent has 262 girls in her girls clubs which show that her plan is working well. Judging from the report of her poultry work alone, in which she has 102 boys and girls, her efforts appear to be meeting with very good returns. One of her boys gives a remarkable report in which he says that he is a first year poultry club member but has won \$30.50 in prizes this year. These prizes were won in county fairs, and both State fairs. Miss Blair in Custer county has enrolled 217 girls in her girls clubs and though she does not report any outstanding piece of work in canning and sewing, she does say that her best girl in first year poultry has 100 White Leghorn chickens to show for her year's work.

There have been five short courses held in this district during the year. One of these at Weatherford was held in connection with the summer term of the normal school there and was for the purpose of instructing the students there regarding club work. Miss Blair held three short courses in her county in canning and meal preparation and Mrs. Condon held a short course in nutrition in her county.

The poultry project is a part of the program of work of each agent in this district. In this region it is perhaps the most important item. Miss Blair assisted her eight women demonstrators to cull their flocks with a saving to each. One of these women reports that after Miss Blair gave the flock a close culling she gathered as many eggs as before culling took place. In her "Swat the Rooster" campaign the cooperating merchants gave from 3 to 5 cents above market price and one man reported buying 2000 pounds of roosters in three days while another bought 2500 pounds in the week. One of the best pieces of Miss Blair's work in poultry was that in connection with marketing eggs, in which she has assisted two of her women to receive 21 cents above local market price after paying 11 cents per dozen for express charges.

Mrs. Mosteller says "There are more purebred chickens in the county today than ever before, the White Leghorn being the favorite, and I'm sure I'm safe in saying that dairy cows and chickens buy the groceries for 75% of our farm people." No poultry raiser in Tillman county made a failure except where rats got most of them. One of the big features in her poultry work was culling and in connection with it, Mr. Smith's visit in which he gave five demonstrations and visited 19 farm flocks. Mrs. Mosteller has 75 women demonstrators and 120 girls.

Miss Huffer also reports from Kiowa county that after attending a culling demonstration a Mr. Payne, who had a flock of 200 hens, culled out 100 and gathered as many eggs as before. Interest in poultry work in her county is good and growing although she now has only 30 adult demonstrators and 140 girls.

Mrs. Condon of Greer county has 75 adult demonstrators and 102 poultry club members through which she carries on this work. One of her workers netted a sum of \$900 on turkeys for last season and has 51 ready for sale this year. Mrs. Condon says her school house poultry shows are fine.

Nutrition work has become an important item in the southwest. In Greer county Mrs. Condon arranged for the loan of three cows for use in poor families and reports that the improvement in the children is noticeable as a result. Miss Blair of Custer county counts her food demonstrations as productive of her best results and in this she leans on the pressure cooker. By it she says she has even taught her people that they can cook navy beans in "gyp" water.

From Tillman county comes the word that it is not impossible to raise good gardens in the sandy section if properly handled and cites the example of one family that in addition to fruit and vegetables for home use this season sold \$637 worth. She says there are others equally successful but not on so large a scale. Every agent in the district has garden demonstrators but in this section of the State particularly the people have been hard hit not only by late frosts but by drouth, wind and hail.

Hot lunches for rural schools is a slogan for every home demonstration agent in this district and each agent has a fair start in carrying it out. Kiowa county reports some schools already serving hot lunches, Greer county reports two, Custer county

one, while Tillman county does not report any but does report a goodly number of schools using milk.

Every agent in the Southwest district has clothing on her program and much good work is being done along these lines. Each agent is preparing for special work with Miss Wright as soon as she can be secured and in the meantime are going ahead alone. Dress forms have been made in every county, 16 in the district. This number shows the actual work of the agents but we do not have figures to show the outgrowth of this number in every instance. Nor is the dress form the only phase of sewing presented by our agents—they give simple demonstrations in millinery, dress-making, plain sewing and in fact every sort of textile work. Mrs. Condon illustrates this phase of the program by this report: "I made an applique bed spread, curtains and dresser scarf, took them with me to club meetings and there are about ten like them now in the county and more being made."

Looking back over the year, all but one agent has served the full time and all of them have done a good year's work. The outstanding features seem to be the work in canning and work with the adult home demonstrations clubs. All of the agents have a better and growing vision of the work than they had a year ago and all of them have good work planned. In the coming year it is hoped that the agents will first, plan more wisely and carefully the work they mean to do; second, develop more leaders and learn to work through them; third, learn to go after and get more results; fourth, attach a greater importance to reports and spend more time on them; fifth, spread the good gospel of raising the standard of home life by "living at home."

SOUTHEAST DISTRICT

By Miss Anna Lee Diehl

At the beginning of the year 1921 I was district agent of Eastern Oklahoma and Mrs. Nannie Collins was assistant district agent. There were under our supervision 19 home demonstration agents working in 19 counties. August 1 this territory was divided according to the lines of territory for the five men district agents and Mrs. Lulu S. Green was given the Northeast district and I selected the Southeast district for my territory.

Individual supervision was given by the district agent in visits to each county, 94 visits in all covering the 19 counties referred to in paragraph one. We studied carefully the office details and going into the field visited club meetings, individual homes and women's meetings.

The milk campaign in this district was carried on during the months of January, February and March, all counties taking part in it. In the 14 counties reporting, 167 schools took part in the campaign and 2442 families used more milk. Five of the home demonstration agents in this district attended the clinic held in cooperation with the Red Cross in Oklahoma City in December. In many of these counties the campaign for more milk cows has been carried on all year and many cream stations are being established and the dairy work is steadily gaining ground, a mighty good thing for the farmer and his family. In McCurtain county 24 iceless refrigerators and 11 cream separators have been purchased.

The State fairs were held at Oklahoma City September 24 to October 1 and at Muskogee October 2 to 8. Visitors greatly marveled at the girls' and women's canning exhibit being so good in a year when all fruit was killed by a late frost and the dry, hot weather had hurt the gardens. 22 counties sent canning exhibits and 15 sent team exhibits, consisting of 10 girls and six jars to a girl. Pontotoc county won the first team prize, the girls in this county having fulfilled the terms of the canning club requirements in their exhibits. Oklahoma county was second, Grady third and Okfuskee fourth. The club sewing exhibit was the best we have ever had at a State fair in both quantity and quality of work done.

All counties in the Southeast district of the State having home demonstration agents held county fairs under the free fair law except three, Bryan, Seminole and Pushmataha. Seminole county held a club contest. This free fair law means much to Oklahoma for under it we have an opportunity to display the results of our club work to the people of the county. The district agent attended six county fairs and

judged the club exhibits and was in charge of the club girls' canning exhibit at the State fairs. At four of these county fairs 348 girls and 54 women made exhibits.

The Oklahoma State Bankers' Association gives four scholarships to club girls. The scholarship in Group 3 was won by Marjorie Rowe of Pottawatomie county. She had been a canning club member for seven years. She married and did not take the scholarship. The girl next in line, Beatrice Cornett of Osage county and a third year canning club member, is now at the A. and M. College taking the home economics course. The scholarship in Group 5 was won by Alta Sue Brown of McCurtain county, a fifth year club girl who had been a club girl in Mississippi for three years and who had won a trip to Washington from that state and who had a banner with 50 ribbons on it that she had won at fairs and exhibits. She is now at the A. and M. College taking the home economics course.

There are now in the Southeast district of the State 21 organized women's clubs with a membership of 255 women. All the counties in the district have from one to three adult organizations except Seminole county and there are six good women's clubs in this county. The home demonstration agents who felt that they could not do anything with adult work are now thinking it is their most pleasant work. It is harder in the cotton growing counties to get the women interested but slowly and surely the work is progressing. The most of these clubs follow the programs sent out by the Extension Division with some variations to suit their needs and conditions.

McCurtain county has a county club association of boys and girls clubs. This association meets at stated times. Delegates are elected from each club center to attend these meetings and to give the reports from their clubs and take back the reports from the meeting. This association has been a help in many ways to the agents for the delegates look after the members of their clubs as to progress in club work, attendance at meetings and club reports. These clubs also have a system of finance by which each club always has money in the treasury and spends it to put over the club activities of the county.

The agents have a varied program of work. One of the most important and necessary to the State is the program of poultry work. In the Southeast district the need of this work is great because the cotton farmers have existed so long without a weekly allowance that they do not understand what a little change from the sale of eggs will amount to at the end of the year. Then in these counties there are so many renters and no facilities for keeping poultry—the high trees are used for roosts and the nests made under the house. Home demonstration work is overcoming these difficulties and in one county, Pushmataha, in 1920 the poultry products sold amounted to \$50,000 and this fall the home demonstration agent has been called repeatedly to cull flocks and order purebred breeding stock. Every rural school, where the roads were such that the agents could reach them, held its school house poultry show. This school house poultry show law of Oklahoma has done much to build up the poultry work and encourage the raising of better poultry.

The bankers' association in McCurtain county gave \$100 with which to buy eggs. They now have over 1000 purebred chickens among the club children and those who have pledged themselves to continue the work as second year members have a pen of five to begin with and are working toward a goal of 50 chicks during 1922. This is one county that has been very backward in poultry work and which is now coming to the front. It is an ideal district for this work—the natural conditions are perfect and with the railroads asking for more freight as the lumber business is gradually finished, we can only supply it by taking up these lines of work that are best suited to the district.

Next to poultry comes dairying. This line of work has progressed slowly because this is the district where the cattle tick has not been wholly eradicated and where little provision has been made to take care of milk and butter in the home. The failure of the cotton crop this year and the fact that the commercial separator people are invading this territory has led to an awakening of the dairy industry and cream stations have been established in many towns and dairy meetings held. The dairy specialist of the Extension Division outlined a plan of work at the beginning of 1921 with the home demonstration agents. We selected Pittsburg county in this district. 12 women were enrolled to do this work. Visits were made to them every two months by the home demonstration agent and dairy specialist and instruc-

tions given along the line of work taken up and an inspection of their work made. This has been a good piece of work and we are sure it will bring good results. We hope to try it in more counties because in this district the problem of food has been an important one. We are now working for a cow and 100 hens on every farm and enough hogs for meat. The 19 milk campaigns put on by the home demonstration agents last spring did much to awaken the people to the need of better food and better home conditions.

The matter of nutrition and food preparation and preservation has been put before the public by the home demonstration agents in the following ways: Canning demonstrations, milk campaigns, hot school lunch campaigns, meat cooking and bread demonstrations. Good gardens are grown and much fruit raised but again cotton farming causes the hurriedly cooked and eaten meals, all of which does not make for well filled cellars and well nourished bodies. 56 steam pressure cookers purchased during the year 1921 are recorded in this district.

Much has been done during the past year with clothing. Mrs. Nannie Collins who was assistant district agent for the first six months of 1921, gave this subject special attention and gave 57 demonstrations in the making of dress forms. She also assisted in the club sewing and as a result more aprons and club dresses were made than ever before. This sewing work has been helpful in organizing women's clubs and we find that women are vitally interested in this line of work and very anxious to learn all they can about it.

Latimer county led in strawberry culture, 35 plats being planted during the fall of 1920 and the spring of 1921. Twenty-five of these plats lived and thrived and five fruit club members exhibited strawberries canned, at the fair. McCurtain county put on a strawberry campaign this fall and as a result 30 girls and 20 women have put out home patches of strawberries.

Community enterprises have been slow in getting started in this district. This fall in Pushmataha county they organized "The Farmers' Educational and Cooperative Union." The women and girls belong to this and I am sure that some women's clubs will be the outgrowth of this organization. In Seminole and McCurtain counties the farmers' union has been a help and a standby for the Extension work and in Latimer county the Red Oak Improvement Association helped the county agents put over many club activities.

A good piece of community work was done by the Pecan Grove Women's Club of Pontotoc county in food preservation when they bought two Burpee can sealers and 2500 sanitary cans, and with the supply of cans on hand put up beans, corn and tomatoes, 4000 cans in all, and are now canning meat. All-day canning meetings were held and some of the women went out and taught the others.

The chamber of commerce at Ada in Pontotoc county moved into new quarters during the summer of 1921 and the secretary invited the county and home demonstration agents to move in with him. They are fitting up a demonstration kitchen for the home demonstration agent. They also subscribed for \$45 worth of magazines to be placed on a reading table for club boys and girls. These periodicals stay on the table one month and then they are permitted to take them home. It is needless to say that the club members are doing this and we think this is the finest thing Ada could do for her rural boys and girls. The home demonstration agent has a canned exhibit in her office window that attracts much attention and Saturday is a busy day in this office.

The Pittsburg county home demonstration agent has a strong advisory board made up of the chairman of the agricultural committee of the chamber of commerce, chairman of the county commissioners, president of the local Red Cross, a member of a rural community club, a club supervisor, the president of the county poultry association and the mayor of a progressive town. This board has been of inestimable help to the home demonstration agent. Latimer county has an advisory board composed of women but they have not done much. Seminole county also has an advisory board. The home demonstration agents are finding that good strong farm women's clubs are a great help to them in their work and we are sure that more attention will be paid to this line of work in the future.

The outlook for the Southeast district is very bright—a complete change from the one crop system to more and better livestock, poultry, fruit, truck gardens, good



A CANNING TEAM AT WORK

A canning team is made up of three club girls who give the demonstration as a group. One girl acts as captain and the other two are assistants. The captain does most of the lecture work and some of the actual work, especially that part which emphasizes the fundamental steps in the process. The assistants do the work preliminary to the calling attention of the fundamental steps such as paring vegetables and fruits, packing jars, etc. By this means the work moves along step by step quickly and smoothly. Sometimes contests are held where teams compete. A good deal of canning team work has been done in several counties and it is a phase of work that will probably be emphasized more in the future.

comfortable homes, well fed and well clothed children, longer terms of school, better attendance, good roads, more people owning their homes, a stable population and a better cooperation between the towns and country. This will not all come in 1922, but in the years following closely, for the leaven is working slowly but surely.

SOUTH CENTRAL DISTRICT

Mrs. Daisy M. Frazier

Until August 1 my supervision work covered 18 counties having home demonstration agents on the west side of the State and was known as the West district. It covered all Mr. Diehl's district and the larger part of Mr. Markland's and Mr. Callarman's districts and one county in Mr. Milstead's district. The Santa Fe railroad was used as a dividing line. Miss Norma Brumbaugh helped me with the supervisory work. We tried to arrange our itineraries so that each one visited all the agents once in every three months. Sometimes special meetings prevented a visit.

The State was divided into five districts July 1. I am very much pleased with the plan to have more district agents. It means closer supervision and more help when an agent undertakes a special project. We have needed this in Oklahoma. It also means help in counties where there are no home demonstration agents but where small groups of people are very much interested in our work. Two weeks were spent in such counties during November. A meeting was held every day, and in Rogers Mills county a meat canning demonstration was given every day but Friday. This means that people were interested because they made all necessary preparation and came in numbers. So I think the plan to have more supervisors is very fine indeed. My present district consists of 18 counties with nine home demonstration agents.

The home demonstration agents under my supervision cooperate with the county agents and either office in the same room or the same building. Forty-seven supervisory visits have been made in this district this year. The office at Guthrie, Logan county, is ideal. It is composed of a suite of three rooms. The center one is small and contains a large flat top desk and the agent's telephone. The home demonstration agent's room is on the east side and the county agent's room on the west. Both offices have outside doors. They are in the post office building and are nicely furnished with desks, rugs, files and chairs.

Our plan is to visit an agent once in every six weeks and explain circular letters and help plan the work. The thing I like best to do is to visit the clubs and club members in their homes. Then you can plan to help them individually, though I have had an opportunity to visit only 74 homes in my Southern district during the year.

Every county where we have a home demonstration agent in this district held a county fair. This year I scored exhibits at six county fairs and the agents from the district scored four county fairs. The number of exhibits made by the clubs at the fairs that I judged is 1204. The increase in club exhibits is wonderful. In Carter county they increased from 14 to 53 individual canning club exhibits in three years. In Grady county the increase was from seven to 23 individual canning club exhibits. The increase in the sewing was even greater and the same was true of the poultry club exhibits. The work of the prize winners in this district was of very high order. Whenever the girls exhibited in the open classes they took all the firsts.

This past year we had an enrollment card for women who wanted some special help and were willing to do more work at home than the club program required. This plan has proved to be very satisfactory. Many excellent reports have been made. They will be included in the annual report. The increase of reports has been fine—an increase of 25% over last year from the South Central district. The women who are in counties where there are no home demonstration agents can enroll and follow the lessons sent and report to us when the work is complete.

The home demonstration agents have organized their women into clubs that meet regularly, the agent meeting with them once each month. Seven of the nine counties have a county federation of these farm women's clubs. They meet every three months. A delegate from each club votes and as many members as care to do so attend. The meetings are held all day with lunch served either at some cafe or

by the high school girls or in picnic fashion. Each club elects two members to act on an advisory board with the home demonstration agent. This board meets every three months and helps plan the community work, club work and all county wide campaigns. The bringing out of latent powers in the farm women is one of the fine results of these meetings. Women forget themselves and simply talk and do things. They often say, "Why, I did not know I could do such a thing." In this district there are 65 organized farm women's clubs with a membership of 1313.

While the farm women's clubs are organized primarily to help the individual farm woman to help herself they also teach these women how to do team work as well. Much fine community work is being done by these clubs. Miss Ross, home demonstration agent in Oklahoma county, reports that at the fairs one of her clubs won second and third prizes on exhibits, making \$60 in premiums.

Mrs. Pollock, woman agent in Logan county, says the women in her twelve organized clubs are active in every phase of community life. Their exhibits at county and State fairs in canning, fancy and plain sewing attracted much attention. They won first prize on their canning exhibits at both Oklahoma City and Muskogee, \$155 altogether. They have taken up clothing and have held a training school similar to that at Oklahoma. They have built and paid for the women's building at the county fair and this year added a rest room and screened porch to the building.

In Garvin county, Mrs. Gentry, the woman agent, not only has a county federation but this federation has federated with the State federation of women's clubs as well. This county federation sent a delegate to the farm congress and the biennial meeting of the State federation of women's clubs. The organization has grown from three clubs with 40 members to nine clubs with 164 members. This county federation is behind the agent in all her work. Reports from women in Grady county show that the members of Mrs. Coryell's home demonstration clubs feel that their club work is a great benefit to them. One of them says "We feel that the women (in the clubs) are becoming more and more an important power for good in better living in our community." Miss Denton, woman agent in Cleveland county, has only one club but reports that club as having bought slides on interior decoration and having placed lilac bushes for school grounds among their activities. Last Christmas Mrs. Church, woman agent in Carter county, through her adult club members had a Christmas tree in every community for the country children. Her women are so interested in their club work that they back her in all her moves. The fact that some of her women have walked four miles to attend club meetings, bringing with them even one and two small children, shows this interest.

There are 129 organized club centers in the South Central district. The boys and girls are organized together. The club meeting is called to order and after a few minutes general program the county agent takes the boys and gives them instructions or they visit the home of a club member and inspect the work done. While the boys are busy the home demonstration agent takes the girls to a room that has been fitted with a stove and table and they try the cooking recipes or work on some piece of their sewing. In this way all of the girls work at the same time and they enjoy the cooperation. The same method is used during the canning season. When the school house is not equipped then the club meets at the teacherage or the home of the supervisor. That the club work in this district is going forward and that it is accomplishing the motto in a degree at least is evidenced in every county having a home demonstration agent. One little girl in Oklahoma county writes "Through club work I have learned to cook and can many different kinds of fruits, vegetables and meats. This fall I won the following prizes on my canning exhibit: Township, second prize, \$2; county, first prize, \$5; State, second prize, \$6.50, on chickens; Muskogee, second prize, \$6.25, on chickens. In all I won \$19.75 on my exhibit and \$4 in the open class. I also learned to sew. This summer I made a lunch set. I also made a dresser scarf, made over a dress, several middies, a serge dress, two dresses for my little sisters and several other things besides doing regular sewing club work."

In speaking of the good the club work does her girls, Mrs. Coryell of Grady county says some of the club girls serve very creditable meals. Mrs. Church says that in her 26 club centers 625 boys and girls held regular monthly meetings. She

gives in her report of the club work the story of two sisters in which club work for these girls has raised the entire family from obscure poverty to well kept self support.

Carter, Comanche and Grady counties each held summer camps for the children. This is the third one for Comanche and the second for each of the others. All were a success.

The milk campaign was carried on in every county. Seven of the nine counties had the milk story given in every school. The special report gives results. From this developed nutrition work. Grady and Garvin counties have been very successful with their work. Six children were taken to the hospital in Chickasha and given free treatment for tonsils and adenoids is a result of the work of Mrs. Coryell. In Garvin county the city federation gave pennants to the schools making the best record in the use of milk. The noticeable thing in the final report is that when the county health survey was made the schools winning the pennants showed the least percent of malnutrition. Another feature was that many children who would not drink milk at home became interested and learned to drink milk with the other youngsters. People are asking to have more work of that kind this year. In Caddo county the need of cows had to be pushed and while the home demonstration agent talked milk the county agent talked better cows. It was necessary to produce the milk before it could be used.

Probably more vegetables have been canned this year than in any one year in Oklahoma. For two years the fruit has failed. Not only the girls but individuals and members of the farm women's clubs canned and stored vegetables for winter use. The use of the pressure cooker has helped this work along. There are 120 pressure cookers in use in the South Central district.

Probably the most useful thing in community work was the rat campaign. "The rats killed all my chickens, what shall I do?" was the report from poultry club members all over the State. So plans were made to rid the communities of these rats. City joined country because the rats were carrying off the city man's bread and cheese. Three counties carried on extensive rat campaigns. The most outstanding is the Washita community in Caddo county. The teacher and supervisor of the club had a little dog named Teddy. Now Teddy could locate a rat with ease. He was a much borrowed dog. He soon learned that when a group of boys came and called "Teddy" it meant lots of fun hunting rats. This community, aided by Teddy and the school children, brought in 1201 rat tails a week for four weeks in succession. During vacation from April 30 until the opening of school in October a total of 4643 rats were killed. 240 rats were killed when an old grain storage tank was razed, showing how old buildings harbor them. Other communities were interested and 3200 rats were reported killed. In all 9284 rats were killed in the district that we know of.

Poultry work is carried on by every home demonstration agent in the district. One objection I have is that they are inclined to sell the chickens raised each year and then next year start over as first year members. However, there are a few of them that keep their foundation stock and pen them for another year's work. Alice Randolph of Oklahoma county had made a profit of \$387.50 from her third year's work in the poultry club. Maudie Womack of Garvin county gave her note to the Successful Farming Magazine for \$15 with which she bought a pen of White Rocks. Her father built for her a small yard and house. Maudie was taking the best of care of her flock when I visited her in the spring. She reports a net profit of \$98.50 from her \$15 investment. She also has twenty birds on hand to start her third year's work. In Grady county the poultry club exhibits increased from 16 to 48 birds in two years. In Carter county the increase was 75% in one year. Interest in poultry work is still leading.

The plan of work in our office is fine indeed but where the agents do not have office help the work is very heavy and cannot be done with one day in the office. In no county in this district does the home demonstration agent work in connection with an outside organization except in Caddo county where the county farmers' union is the force behind the agents. In each of the other counties where there is any organization at all the home demonstration agent has built it for herself.

The field work is better planned and a county wide plan is being worked out for both agents. The improvement of the home is as necessary as any other part of farm work. The fact that the county agents are showing such an interest in home conveniences tells us that the farmers are interested.

The following lines of work are planned for this district for next year:

To push the slogan "Living at home for every family."

A pressure or fireless cooker and a wheeled tray in every home.

To put as many canning club products as possible on the market.

Increase the percentage of standard chickens and eggs.

Work on the cow and calf club so every home will have milk and be able to care for it.

See that every land owner has a berry patch started.

That as many renters as have long leases have berry patches.

Work on special products for the club girls to sell.

Canning must bring in some money if we hold our girls in this club.

Sub-irrigation where advisable will be stressed.

This is my eighth year in the home demonstration work, first as county home demonstration agent and then district agent in Texas and the past four years in Oklahoma, and this year has been by far the best of all. The work has advanced and is on a more permanent foundation than ever before.

NORTHEAST DISTRICT

Mrs. Lulu Samuel Green

The Northeast district is composed of 16 counties with varied industries. We have seven home demonstration agents and 13 county agents in this district. My work as district agent in the Northeast section began August 1.

The largest campaigns held in this district were the milk campaigns held in Tulsa and Muskogee counties. We have two counties in this district where the home demonstration agents have not done the milk work but nutrition work has been carried on by the Red Cross worker. In every county where we have a home demonstration agent we have had a hot school lunch or milk campaign. The milk campaign was put on in 81 schools in this district and as a result 1793 families are using more milk.

The "Swat the Rooster" campaign was a decided success in Tulsa, Muskogee and Okmulgee counties. This was given so much publicity by local papers that it extended almost over the entire district. In other counties people were following instructions as published in papers from these counties. All these articles were sent out by the specialist from the A. and M. College and given to papers by local agents.

The fair work has been an important part of the work of the district agent of this section. I judged at nine county fairs and had charge of household science department of the Muskogee Free State Fair. The nine county fairs judged were in Ottawa, Creek, Okmulgee, Tulsa, Muskogee, Adair, Rogers, Wagoner, and Mayes counties. This work gave an idea of the work of the home demonstration agents in their counties. This district has two scholarship girls in the A. and M. College as a result of prizes won at fairs. There were 129 county and township fairs held in this district. The canning, sewing and poultry work in Tulsa county was one of the biggest factors in making people realize the worth of home demonstration agent work in a county. Okmulgee county had a good exhibit, carefully arranged, but not as large as Tulsa. The sewing was superior to any I have seen in the past few years. Rogers county had five women's club exhibits and a good girls' exhibit although they had lost their home demonstration agent. These women are determined to carry on the work started in their county by the extension worker and are doing everything in their power to keep the work going until they get a new home demonstration agent. The work in this county was a success and it shows great results.

We have 20 organized adult clubs with a membership of 238 women in this district. Mayes and Rogers counties have a county federation. These women are interested in programs outlined by the College and are doing splendid work. Tulsa

county gave moving picture shows in rural communities on farm conveniences, household conveniences and farm inconveniences to the adult club members which have been beneficial in many respects.

Four of the counties where there are home demonstration agents have a local form of organization called an advisory board, composed of at least five members. In addition to this, where there are organizations of women's home demonstration clubs we have formed a county federation. We have in each county a woman appointed by the State federation of women's clubs to cooperate with the home demonstration agent in building up the locality in problems of the home. Where there are local farm organizations the agents are working in harmony as far as this program permits, but not taking active part in accepting official duties in their organization.

The program of work in the Northeast district will have to be classified into counties for hardly in any two counties do we find the same conditions existing. The Northeast section, Washington, Osage and Ottawa counties are very different from the other sections. Osage county, a county of mostly rich Indian homesteads, is another problem. Much is being done to help to make these homes more homelike. There are a number of good girls' clubs in all lines of work and special programs have been made in nutrition work and hot school lunches. The work of women's clubs has been started in the county and promises to be a leading work. One of the most interesting campaigns of the hot school lunch program in the Northeast district was that of Osage county. Miss Ella Melone, Osage county superintendent of schools, joined the home demonstration agent, Mrs. Ginevra Lohman, in a campaign for hot lunches in rural schools.

While all the club organizations in Washington county are doing active work, the nutrition work and child welfare work started at the head of the list. The home demonstration agent in this county has been untiring in her efforts to use every method that might help the mothers and children in bringing health and efficiency to the front. School lunch work, through work with teachers and Red Cross worker, has been of great benefit to this county. The poultry work with its county poultry shows is bringing the value of the hen to the notice of all.

While Tulsa county is an oil county, it has fertile soil for gardening. This county had the best exhibit in all lines of club work of any county visited in the county fair circuit. The sewing and canning were largest and showed splendid workmanship. They have organized women's home demonstration clubs doing work with the women. Tulsa county ranks high in poultry work.

Okmulgee county is an oil county. The clubs are doing good work in all lines. Forty dress forms have been made in this county.

It seems that Muskogee county has always been strong on poultry work. While there is much cotton grown, it is fertile ground for any agricultural programs. Women's clubs are being organized and there are several girls' clubs doing the work as outlined. The milk campaign and school lunch program has been carried on in this county. Much has been done with dress form work. Thirty-five hats were made by the home demonstration agent in this county.

Wagoner county is strictly agricultural and one of the best fields for club work. We have no women's home demonstration clubs in this county. The girls' club work is going nicely. The sewing work seems to take the lead in this county.

We have not had an agent in Mayes county as long as in some of the other counties. This is one of the counties that is leading in adult work. They have a county federation of women's home demonstration clubs which reaches every part of the county. Every club is doing splendid work. This county ranks high in poultry club work. The dress form work in this county stands at the head of the district. Miss Jones has 65 dress forms to her credit.

Rogers county has no home demonstration agent now but the work started by the home demonstration agent is being carried on by the women of the county. They had one of the best women's canning club exhibits at the county fair. Five clubs exhibited and all ranked high in scoring. This county is working hard to have another home demonstration agent.

In Adair county the county agent and the superintendent of schools are trying to raise the finances for a woman agent. We have planned a program of work that

we will give counties where there is a county agent but not a home demonstration agent.

NORTHWEST DISTRICT

By Miss Norma Brumbaugh

The Northwest district is composed of 17 counties with home demonstration agents in six counties, Harper, Noble, Woodward, Major, Creek, and Okfuskee. This report, although the redistricting took place in July, will cover the territory from December, 1920 to December, 1921.

In supervising the home demonstration agents and work in the Northwest district the weekly reports of the agents have played a great part. Before going into a county these reports were checked over by the district agent and notations made of any points to be brought up. The district agent tried to visit each county at least once in two months. However, it was not always possible to do so. Supervision was also carried on through letters, bulletins and circulars. From August 1 to the close of the year, 22 visits of supervision were made as home economics specialist and district agent.

There were 16 county fairs in the Northwest district with very pronounced activities the past year. The fair work was limited to township and county fairs at which good showings were made in boys' and girls' club work and in adult work as well. In checking over the exhibits of the women's departments in nine counties it was noticed that the textile exhibits were of good quality. As the fruit crop generally was a failure the exhibits of fruits were small. There was a very noticeable difference in the quantity, quality and arrangement of exhibits in counties where there were home demonstration agents and in counties without demonstration agents.

One of the most interesting fairs held in the Northwest was the tri-county fair held at Guymon. The enthusiastic spirit of every one working together has made of this fair a real educational exhibit and a success at that. The women's exhibit occupied a large tent which was in charge of the home economics department of the Goodwell Agricultural College. Not only was work displayed in this tent but meals were served there in cafeteria style to the general public.

The adult demonstration phase of extension work in the Northwest is carried on through 31 home demonstration clubs with an enrollment of 553. The women are realizing more and more that there is no profession so great as that of home-making and to be the most proficient home women they must have a scientific knowledge of home-making and in addition to this a knowledge of community interests and life.

In two counties of this district there are federations of women's clubs through which much good, county-wide, has been accomplished. The outstanding accomplishments are those that have improved home conditions, the preserving of enough food for home consumption and the poultry phase of home demonstration work. General club work in the Northwest district is in a very promising condition. It is conducted through clubs with either a teacher or some local leader as supervisor. Much of the success of the club depends upon the selection of a leader and the hearty cooperation of the parents. Each year as the influence of the club work spreads it is easier to choose a person who is an enthusiastic leader of young people.

Without recreational features, club work would not be complete. The two boys' and girls' club camps of the Northwest were a success as the home demonstration and county agents believed that all work and no play makes of the boys and girls dull club members. The plan for organizing the camps was somewhat of a military one, in that the boys and girls were divided into 4-H squads with a captain for each one. Out of these camps have developed ideas that are useful in the handling of boys and girls themselves. The camps stand for the broad ideas of teaching boys and girls in their own environment, running the camps as a democracy, and presenting to the boys and girls the possibilities of 4-H club development. The girls' club exhibits, whether shown at township, county or state fairs, were of a quality superior to that of the women in open class exhibits of the same nature which was a demonstration of what club work can do as an organized working unit.

The poultry phase of extension work is the outstanding one in the Northwest

with an enrollment of 1087 girl club members and 157 adult poultry demonstrators. The only drawbacks to poultry production have been a lack of proper housing facilities and the great number of rats and coyotes. The counties that have done particularly good poultry work are Harper, Woodward and Major. However, in the counties in which there are home demonstration agents and county agents the poultry interests have been advanced through the poultry clubs to the extent that these clubs have been the means of bringing more purebred poultry into the State than any other organization.

The county poultry federations have done much to back club work and to make it possible to have the county poultry shows. The school house poultry shows are of great importance to the boys and girls of the Northwest. In Woodward county 28 shows were conducted by the agents and the county superintendent during the month of October. The children from more than 80 districts attended and made exhibits. These shows are made possible by the Jackson poultry law.

In Harper county the shows were conducted in a very good manner. During the shows the agents gave detailed talks in "Feeding, Housing and Show Points." Under feeding this key was used and every child learned it as well as the grown ups:

The big W—water

The big L—lime, and

The 4 G's—grit, grain, grubs and greens.

The value of the poultry industry as reported by the poultry club members and the adult demonstrators is \$18,854.45 in these 17 counties.

The food work was a requirement of each club girl regardless of the club to which she might belong. The demonstrations have taught the girls how to make proper combinations of food, to use a variety of food and the different methods of preparation. Food preservation in the northwest shows the use of the steam pressure cooker, particularly in meat canning. The quality of the work in the preservation of vegetables is very good but the quantity is lacking. In Creek county canning is done with seven Burpee sealers and 25 pressure cookers. One sealer was used by five families and over 3000 cans were filled this summer. In the food preservation phase of extension work the agents are striving to get the women of the home to preserve enough food for home consumption so that each family may have a can of fruit and a can of vegetables for every day in the year.

For the first time we have had a sewing club with 656 members in this district alone. The agents have found that this is one of the most popular clubs as the girls can learn to make garments for themselves. The 28 home demonstrators in clothing have done more in the remodeling of garments and the making of dress forms than with any other phase of textile work. To show the value of dress form making, one agent reports that one of the most helpful demonstrations given this year was the dress form demonstration given to the working girls of Woodward. It was given on the second floor of the leading department store at night. Eighteen girls attended and 11 of them now have their own dress forms and can do their sewing at night in much less time and with great pleasure.

Gardening in the Northwest is not done extensively, few people growing a garden sufficient to supply the family table with fresh vegetables. In all there are 381 garden club members and 76 adult garden demonstrators, this work being done in connection with the canning club. A Mrs. Brandt, with assistance, cultivated a 2 1-2 acre garden from which she canned 1975 quarts in tin and 250 quarts in glass; she sold \$300 worth of fresh vegetables. Although the rainfall in the Northwest district is very uncertain, gardens can be grown generally and the idea that this cannot be done must be overcome.

In the six counties of the Northwest where there are home demonstration agents much has been done to improve the health of the various communities through health talks and nutrition classes.

There are many organizations cooperating with the extension workers in this district as the grange, farmers' union, farm bureau, county poultry associations, Red Cross, Oklahoma public health association, chapters of the Oklahoma federation of women's clubs, county teachers' associations, and the county advisory board, but in no county is there any one organization through which the home demonstration agent works alone.

In order to facilitate the work in the county the home demonstration agent has made for herself an organization, the advisory board. This advisory board is a representative board of the women of the county with committee programs of this nature, finance, club work, school betterment, poultry work, home demonstration clubs and home demonstrators. In each of the six counties where there are home demonstration agents the agents have found that they need some organization through which to work, thus making of each county an organized unit in home demonstration work.

The foundation for extension work in the Northwest has been laid and each year it is meeting with stronger support than it did the year before. The people are realizing in the words of Dr. S. A. Knapp that "Country life can be placed upon a higher plane of profit, comfort, culture, influence and power".

EXTENSION SPECIALISTS

The work of the extension specialists is planned with the idea of working only with and through the county agents or home demonstration agents. No work is planned for extension specialists in counties that do not have either a county agent or a home demonstration agent. Specialists frequently attend urgent calls for help from counties not having an agent but without the follow up help of a local agent, little good comes of the specialist's efforts.

Each specialist is expected to have a definite plan of work and no plan is approved that does not contemplate very close cooperation with the county agent or home demonstration agent. Each specialist works under a carefully prepared agreement outlining the scope and general plan of work.

RURAL SANITATION

PROJECT NO. 6

This project was discontinued in September, 1921, Dr. D. B. Tucker, the leader of this project for several years, having resigned to accept other work at a greater salary. Dr. Tucker reports that from January 1, 1921 to August 23, 1921, the date her resignation became effective, she traveled a total of 8662 miles, made addresses at 135 meetings with an attendance of 20,083, made 29 visits to county and home demonstration agents, wrote 157 official letters, spent 160 days in the field and 19 in the office.

NEGRO WORK—MEN AND BOYS

PROJECT NO. 7

Agricultural extension work was carried on this year among negroes in the following counties: Kingfisher, Logan, Oklahoma, Lincoln, Okfuskee, Seminole, Creek, Okmulgee, Wagoner, McIntosh, and McCurtain. On account of a shortage of funds the Colored Agricultural and Normal University at Langston failed to contribute any funds this year to this work. The entire expense of it was paid from the regular Extension funds of the A. and M. College and the U. S. Department of Agriculture, except that two or three counties paid part of the traveling expenses of the colored county agents.

There were nine colored county agents under the supervision of a colored district agent whose headquarters were supposed to be at the Langston University. A negro agents' meeting was held at Langston July 11-15, 1921, at which all the colored agents attended. Speakers from the Extension Division of the A. and M. College at Stillwater assisted at this meeting. It was held during the colored teachers' meeting with a view of securing closer cooperation between the colored agents and the colored teachers of the State.

The following is a partial summary of the work done by the negro county agents in Oklahoma as summarized from their reports by W. A. Hill, district agent for negro work:

There are three regular county organizations supporting the work with a selected membership, 73 community farmers' clubs with a membership of 1622. Forty-three of these clubs were organized this year. These organizations were quite active in cooperative buying and selling, reporting a total saving of \$15,331.30.

There were 92 adult negro corn demonstrators, 72 of whom made reports. The average yield for those reporting was 41 7-8 bushels per acre which was 12 2-9 bushels more than was grown under ordinary methods. There were 23 kafir demonstrators, 18 of whom reported. They had an average yield of 35 bushels per acre. There were 84 demonstrators in cotton, 57 of whom reported. They report a yield of 545 pounds of seed cotton per acre which was over 250 pounds above the average for the county. There were 12 demonstrators in tomatoes, eight of whom reported. The average yield of those reporting was 263 bushels per acre. There were 27 demonstrators in oats, 23 of whom reported. The average yield of those reporting was 23 3-4 bushels per acre which they claim is a gain of seven bushels per acre because of demonstration methods. There were 23 demonstrators in sorghum, 16 in alfalfa, six in Sudan and 35 in cowpeas, in all of which substantial gains over ordinary methods were reported.

There were 28 demonstrators in peanuts, 18 of whom reported. The average yield of those reporting was 39 plus bushels of nuts and 1.4 tons of hay per acre. There were 55 demonstrators in Irish potatoes and 47 in sweet potatoes. The yields of those reporting were 48.5 bushels of Irish and 146 2-7 bushels of sweet per acre.

In orchard work 1482 fruit trees were handled according to demonstration methods. 2857 trees were inspected by the agents, 2074 trees were pruned and 2161 trees were sprayed through the agents' influence. As demonstrations the agents actually sprayed 169 trees and pruned 103.

There were bought this year through the agents' influence three purebred stallions, five jacks and 14 brood mares. Twenty purebred stallions and 18 jacks belong to negroes in that part of the State having negro agents. There were bought through the influence of the agents 10 purebred dairy bulls, 39 purebred dairy cows and 17 grade dairy cows, also eight purebred beef bulls and 28 purebred beef cows; also 54 purebred boars and 92 purebred sows for negro farmers. 280 negro farmers were advised in the proper use of commercial fertilizers and 430 farmers induced to take better care of farm manure.

249 farm and home sanitary conditions were improved, 160 homes screened, 42 sanitary privies erected, three septic tanks and 11 telephone systems installed; also three home lighting systems and many other improvements in farm homes and buildings.

The colored agents report having made 1117 visits to demonstrators, 783 to cooperators, 2379 to other farmers, 472 to business men and 3157 to boys' and girls' club members. They traveled a total of 40,756 miles during the year, attended 915 meetings of all kinds at which there was an approximate attendance of 44,322 people. About 36 percent of their time was spent in the office and 64 percent in the field. 3717 official letters were written, 93 articles prepared for the press, 79 circular letters prepared and 2780 copies sent out, 6905 bulletins distributed and 436 visits made to schools.

In negro boys' club work there were 148 organized community clubs, 719 meetings were held, 12 boys attended short courses and 25 entered college for the first time; 21 went to the State fairs. There were 29 boys' club shows held at which boys won \$1161 on crops and \$264 on animals. 37 boys were loaned money by individuals or banks, the amount so loaned being \$1597. Out of these loans \$25 has been lost. 73 boys have their own bank accounts.

There were 639 boys enrolled in corn clubs, 238 in peanuts, 36 in peanut hay demonstrations, 30 in Irish potatoes, 123 in sweet potatoes, 153 in grain sorghums, 219 in cotton, 46 in fattening demonstrations and 53 in breeding phase of pig club work.

The district agent reports that in supervising the work he has attended 107 meetings with an approximate attendance of 8079, made 84 visits to agents, assisted at 47 demonstrations and traveled a total of 13,653 miles.

NEGRO WORK FOR WOMEN AND GIRLS**PROJECT NO. 8**

Negro home demonstration work was carried on by four colored women agents in six counties each having a large negro farming population. The work was under the general supervision of Miss Anna L. Diehl, white district agent.

The program of work was much the same as that used in home demonstration work for white people. The progress that has been made in this work since the first colored woman agent was appointed is very evident. The negro women demonstrators and club members seem to give closer attention and follow instructions better than many others and the results obtained are very satisfactory. Each colored woman agent attended one of the group meetings for the white agents in March, 1921, and were deeply interested in the lectures and demonstrations, especially Dr. Lund's demonstrations in canning sweet potatoes. They also attended the conference of all negro agents July 11-15 at the Langston Colored University.

In the girls' club work there were 658 girls enrolled in canning and 197 in poultry. These club girls canned 4104 quarts of vegetables and 634 quarts of fruit. They also made jellies and vinegar. The poultry club members raised 400 chickens. They were required to set only one hen each. They were all required to do sewing and their reports show that there were made 483 caps, 378 aprons, 116 sewing bags, 109 dresses, 398 towels, 319 holders, 21 pairs of curtains and 63 hats.

A part of the State Fair School fund was set aside for the negroes and 15 of the highest scoring prize winning girls were sent to a negro fair school at Langston. Here they were taught sewing, games and a review of club work.

The negro women are being organized into clubs. In three counties there are nine clubs with a membership of 182. There were 94 negro women enrolled in 1921 in 244 different demonstration activities such as gardening, canning, sewing, cooking, poultry and dairy work.

Several colored community fairs were held in Lincoln, Muskogee and McIntosh counties and some excellent exhibits were made at the county fairs in Okfuskee, Okmulgee and Lincoln counties. Negro club girls' team exhibits in canning were sent to the State fairs at Oklahoma City and Muskogee from the Okfuskee, Okmulgee, Muskogee and McIntosh county fairs. Another feature of negro club work is the school house poultry shows conducted under the Jackson Poultry law. There were poultry shows held at 27 colored school houses in Lincoln county at which \$200 was awarded as prizes.

In connection with their program of work the colored women agents report the following articles bought for homes: 41 barrel churns, seven separators, 54 milk pails, 27 iceless refrigerators, 54 butter molds, 20 water systems, 165 lighting systems, 10 septic tanks, four fireless cookers, 85 kitchen cabinets, 54 wood boxes, 230 flower boxes, five steam pressure cookers, six heating systems, 12 sinks and three screened houses.

Considerable home demonstration and girls' club work has been carried on with negro women and girls by the white agents in counties that do not have colored agents. As an example, Mrs. Jackson, the white woman agent in Tulsa county, had 20 negro girls enrolled in club work and very satisfactory work was accomplished. The total enrollment of negro women and girls in all lines of work was 1205 girls and 288 women. The four colored women agents report having visited 817 girl club members, 202 schools and 732 adult home demonstrators.

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POULTRY CLUB WORK**PROJECT NO. 9**

This report will in some cases show a decrease in total figures due to the fact that the report last year was made out a month later than this year. This year we have been unable to get in all the information desired, but feel it will come in later.

In some cases it will be noted that the total figures show an increase over last year and this would lead us to believe that there has been a greater interest and

more activity than was manifested last year. Also, our observations throughout the year lead us to believe that were it possible to measure the work in detail it would show a big advance in results. In talking to the agents in the field it is common to have them remark that more people are interested in purebred poultry each year they are in the county.

The club enrollment this year exceeds that of last year by approximately one thousand members. Also, our poultry compositions as received show a very substantial increase over last year.

The poultry club reports received show a decrease this year compared with last year. However, this is due to the fact that the agents were unable to get them in on time. This being true, we could not expect our business account sheet to show up as well as last year. These record books are coming in daily and we feel sure that by the first of January we will have received more reports than were received last year.

The idea of better housing seems to be taking hold on the poultrymen of Oklahoma more each year as shown by the large number of requests received for plans and the new houses to be seen throughout the country.

The county branch shows and the poultry exhibits at the county fairs show improvements in counties visited last year and again this year. Reports from other shows bring the same news. The county branches of the Oklahoma State Poultry Federation have been a great aid in the boost for more and better poultry and exhibits.

The State club shows at the Oklahoma State Fair and the Oklahoma Free State Fair were good representatives of the interest and ability of the boys' and girls' poultry clubs, some of the club members' birds at these fairs winning over the adults' birds. The Oklahoma State Fair had approximately 540 entries. At the Oklahoma State Poultry Show held last December we had 310 birds exhibited by poultry club members.

The judging and culling was stressed again this year to the poultry club members with the idea of instructing the child how to mate for the standard qualities along with heavy production. This line of work also teaches them the value of their birds, not only as breeders, but in disposing of them as well.

There were 73 counties organized for boys' and girls' club work with a total of 9617 members of which 2310 made reports. 106,484 eggs were set, 73,953 chicks hatched and 48,959 chicks raised. 13,080 bulletins, 4234 posters and 27,350 record books were mailed out.

The following is the financial statement of boys' and girls' poultry clubs in Oklahoma for 1921:

CREDIT	
Fowls sold, 10,586	\$ 8,373.11
Eggs sold, 107,013	4,321.23
Fowls on hand Nov. 1, 30,860	38,985.26
Houses and coops built, 1,680	4,020.72
Prizes won	2,756.88
Total	\$58,257.20
DEBIT	
Poultry houses and coops built	4,020.72
Eggs bought for hatching	4,576.59
Breeding stock bought	1,992.21
Feed bought	6,346.46
Total	\$16,935.98
Profit	\$41,321.22

At the State and county fairs there were exhibited 4362 fowls and 430 dozen eggs. A total value of \$3251 in prizes were won. 1487 club members made exhibits.

There have been held in the State during the past year not less than 250 poultry shows at State, county and community fairs. This number does not include the State Show. Thirty county branch shows and 600 school house shows were held under the State Poultry law. As near as can be determined, 8500 persons have made exhibits at these fairs and shows and a total of not less than \$32,000 has been paid in premiums to those exhibitors.

There were 755 school house poultry and egg shows held during the year. 3944 children made exhibits. 10,210 birds and 1397 dozen eggs were shown. 13,966 adults and 26,581 children attended these school house shows and \$6,137.85 was awarded in premiums. During the year 872 flocks were culled, totaling 45,953 birds.

The annual boys' and girls' poultry judging contest held in connection with the Oklahoma State Poultry Show at Muskogee was without doubt the most successful one ever conducted to date. While the number represented in this contest was not so great by possibly a few, yet it in many cases surpasses any former contest. There was a total of 11 counties represented with three representatives from each county. Each child was required to judge one class of three birds each of the following varieties: Single Comb Rhode Island Reds, White Wyandottes, Buff Orpingtons, Barred Rocks and White Leghorns. The following prizes were offered: First, \$60; second, \$54; third, \$48; fourth, \$42; fifth, \$36; sixth, \$30; seventh to twelfth, inclusive, \$21 each; thirteenth to twenty-fifth, inclusive, \$12 each.

In the discharge of his duties, the leader of the Poultry Club project traveled a total of 13,142 miles, gave 101 demonstrations at which there was an attendance of 3567, attended 159 meetings with a total attendance of 13,967, wrote 15 articles for publication, 849 personal letters on official matters; 16 circular letters and 14 club instructions were issued and a total of 61,549 copies were mailed out. 265 points in 33 counties were visited.

In the discharge of his duties as assistant extension poultryman, E. O. Edson traveled 16,103 miles, visited 263 points in 37 counties, made 78 visits to club members and 158 other visits, wrote 268 letters and 11 circular letters of which 38,309 copies were sent out, prepared five articles for publication, attended 43 club meetings with an attendance of 1638, delivered 126 lectures and gave 92 demonstrations with a total attendance of 14,560, and conducted eight short courses.

DAIRY EXTENSION WORK

PROJECT NO. 12

C. W. Radway, the leader of this project, submits the following report of his activities during the past year.

Dairy farming in Oklahoma might be divided into three classes. First, the farmer who keeps from five to ten cows of no definite blood lines or ancestry and who sells a little cream to the nearest creamery or cream station. His main object in milking cows is to supply his table with milk and butter and to have a little surplus to help pay for the groceries and clothing for his family. This is the type of dairying existing in about half of the State but especially in the northwestern portion. The Dairy Extension work with these people is mainly demonstrations in care and feeding, also organizing cow testing clubs and giving lectures and demonstrations in judging dairy cattle. Better sires are urged but due to the dairy farmers being so scattered, little interest is shown in bull association work.

A second class and much smaller, perhaps not comprising more than twenty percent of the dairy farmers of the State, is the dairyman who supplies our larger towns and cities with market milk. For the most part these dairymen have a dairy breed. They are intensely interested in production, and feeding projects are in order, also cow testing work, both private and official. These dairymen are getting better sires each year, some of them cooperating but not yet has a bull association been formed with four blocks. There are many cases of three or more men having an interest in a bull. Considerable time has been spent in urging better methods, also in furnishing plans for barns and milk houses. During the past year very little building has been done. Many have made temporary repairs to barns and milk houses to tide them over to another year. Practically all of our cow testing clubs and boys' dairy clubs are around the larger towns and cities.

Another class and still smaller than the other two, are those men who believe that "blood will tell." They accordingly decided on some blood line in their favorite breed, went out and paid the price for a real herd sire that had some good records in his pedigree. Many of these men are the leaders in cow testing clubs, boys' dairy clubs, better sires promotion and are the back bone of our dairy exhibits.

There is one more class, a class far too large for the good of the State, who choose to follow the one crop system and now find themselves stranded on cowless farms. The majority of them are renters and are helpless to change their system. The home demonstration agents are doing a splendid work in conducting milk campaigns in the schools. It will at least demonstrate the necessity of milk for the growing child, but the system that has been followed for years cannot be changed so easily. Low priced cotton and a surplus of boll weevil are more potent factors in Southeastern Oklahoma. One year ago there were 12 counties in Southeastern Oklahoma without a creamery or cream station and most of the towns were without an adequate milk supply. At present only six of these counties are without a creamery or a cream station and there is some improvement in practically all the towns in their milk supply.

The Dairy Extension work is carried on mainly by means of projects in the various counties. These projects outline a certain type of dairy work to be done, also suggesting method to be followed during the entire year. A project when once decided is presented by means of demonstrations, lectures and by personal visits to as many places as time will permit.

The kind of project presented and method of presentation depends on the following factors:

1. Needs of community.
2. Attitude of people toward project.
3. Influence of work in community.
4. Relation of project to general program.

PROGRAM OF WORK FOR 1921

Care and Marketing of Dairy Products.

1. More uniform production.
2. Better care of dairy products.

Care and Feeding of Dairy Cows.

1. Feeding demonstration.

Promotion of Better Sires

Junior Dairy Clubs.

Cow Testing Work.

Buildings and Improvements.

CARE AND MARKETING OF DAIRY PRODUCTS

In the past the dairy specialist has devoted practically all the time to problems of production but in order to meet the wishes of many dairymen some time is being given to market problems. This phase of dairy extension work is being handled in the following manner:

1. By advocating a more uniform production of milk throughout the year. This is particularly true around the larger towns and cities. In most cases the surplus of milk lasts only two or three months. This surplus could be placed by good advertising but it is unwise to do so when the new demand could not be met after a few weeks.
2. Much attention is being devoted to care and handling of dairy products. Many dairymen fail to find a ready market because they handle their product in a very unattractive manner and often in a very unsanitary place.
3. Publicity showing value of dairy products over substitutes. During the past year very little advertising has been done by the dairymen. However, a dairy film owned by the Oklahoma State Dairy Association has been sent to several counties.

FEEDING DEMONSTRATION

The demonstrations in feeding dairy cattle are carried on with those dairymen in the cow testing association or in the cow testing clubs. A demonstration in feeding is checked up by competent herd records.

Last December Mr. J. C. Rahm of Kremlin, Oklahoma, purchased eight Holstein cows varying in price from \$250 to \$400. The county agent and the dairy specialist called at his farm soon after these cattle arrived and found Mr. Rahm very anxious

to learn about feeding for milk production. He had provided a good supply of alfalfa hay and corn silage. A grain ration consisting of three parts ground oats, one part cottonseed meal, one part corn meal and one part bran was suggested. The grain ration when mixed cost \$1.53 per hundred. During the month of January eight cows produced 9114 pounds of milk, the grain ration recommended by the specialist costing \$1.53 per hundred. During February these cows produced 6748 pounds of milk on a ready mixed feed bought of a dealer costing \$2.50 per hundred. During March the same cows gave 7719 pounds of milk on the same grain ration used in January, costing \$1.58 per hundred.

In February Mr. Rahm used a ready mixed feed not particularly designed for milk production, but yielded to the fine arguments of the grain dealer. Another factor enters into the February milk records. Mr. Rahm needed a better stable, one that had proper ventilation and so he put in a concrete floor and steel stanchions and boarded up the cracks in the barn. During this time the cows had no regular place to eat and could not be fed according to production. Also, they were exposed to a couple of storms. After looking over the record Mr. Rahm was convinced that care and feeding were the big factors in profitable dairying.

Mr. A. V. Settles of Muskogee, Oklahoma, a dairyman milking 35 cows, has a daughter who is a member of the dairy club. Mr. Settles agreed to provide a balanced ration for the club heifer. He also figured that if the ration was good for the club heifer it ought to be good for the dairy herd, so he tried it out. He had been feeding a ready mixed feed costing \$4.00 per hundred. It was a splendid feed. He started on the club ration consisting of three parts ground oats, one part cottonseed meal, one part corn meal, and one part wheat bran. The ration when mixed cost \$2.00 per hundred based on Muskogee prices. The herd produced the same amount of milk as they did on the \$4.00 per hundred ration.

PUREBRED SIRE PROMOTION

Several dairymen have been interviewed in those counties where a bull association seemed possible but the dairymen did not seem to be interested in the association plan. They wanted their own bulls. A few of the men are getting splendid bulls, but there is a great need for systematic bull work in Oklahoma.

BOYS' DAIRY CLUBS

Previous to 1921 no very definite results were accomplished in Oklahoma in dairy club work. This was due mainly to the membership being scattered and therefore, lacked the proper supervision. This year four dairy clubs were organized, in Carter, Muskogee, Kiowa and Tulsa counties. In enrolling these clubs consideration was given to:

1. Attitude of parents toward project.
2. Outlook as an investment.
3. Probability of proper feed and care.
4. Market for products.
5. Provision for purebred sire.

It is planned that the county agent and the dairy specialist meet with each dairy club at least five times during the year for the purpose of advising on feeding and caring for the heifers and also to assist the members in making out their record books in proper form. As soon as the club is organized and the heifers delivered, complete and accurate data of each heifer is secured. All club members are required to keep complete and accurate records of feed consumed and milk produced and to report same at the end of each quarter. These quarterly reports are to go to the county agent for checking and show the pounds of milk produced each month, the test, pounds of butter fat, value of product, cost of feed and profit over cost of feed. The quarterly report system has been used beginning the last quarter only, but the number coming in indicates a marked improvement over the old system of depending on the record books at the end of the year.

Of the reports received, approximately 50 percent came from those having some supervision from the county agent and the dairy specialist. Of the 31 reports received, six gave complete reports showing production of their heifers and cost of feed.

The total profit of these six heifers above cost of feed was \$1260.52. Five sent in reports showing that their heifers were fresh only recently. Twenty reports were on heifers not fresh to date and showing no profit on production, but these heifers for the most part are doing well and should develop into nice producing cows.

Of the 82 partial reports received, 34 had registered Jerseys, 10 had registered Holsteins, 9 had registered Guernseys, 17 had grade Jerseys, 9 had grade Holsteins and three had grade Guernseys, making in all 51 Jerseys, 19 Holsteins and 12 Guernseys.

Out of the 14 registered heifers bought for the Ardmore Club, one reacted to tuberculosis, but the loss was met by insurance. Another died from poisoning but was insured. Two members have failed to report the production but the rest of those in milk are going to return interest on the investment.

The dairy club at Muskogee started with 22 registered Jersey heifers. These heifers were bought in May, 1921, and every month since that time County Agent J. M. White and the dairy specialist have called on each of these club members for the purpose of helping them on problems of care and feeding. The communities in which these heifers are placed are so well pleased with them that as many more heifers could be sold there. During the last Free State Fair held at Muskogee a cow race was held which was to determine what cow could produce the most butter fat in seven days. Four of the dairy club boys entered their heifers in this contest, competing against nine other Jerseys owned and fed by experienced dairymen. These boys had their heifers in fine condition due to the constant supervision of their county agent and this good preparation was probably the main factor in the result. When the contest closed these four dairy heifers stood second, third, fourth and fifth. The boys were well repaid for their many hours of work caring for their heifers; also it was a good demonstration to many adults as to what good care and a balanced ration would do.

Last December several of the dairymen near Enid wanted records on their herds but there were not enough herds for an association so the following plan was devised: The dairymen would furnish all data concerning his herd, also keep his own weights and take his own samples for testing. The weights and samples are then brought to a central point and the testing done. The dairymen hold a meeting as soon as the testing is finished for the purpose of discussing feeding or other problems.

During the past year this method has proved more satisfactory in handling the feeding problems than the regular cow testing association but it has many disadvantages. There is too great a personal element involved in the weighing of the milk and taking the samples. Of course, there is no competition between dairymen in these tests and the records are solely for their own personal information concerning their own herd.

After one year's work the Enid dairymen have requested that the work be continued. They have also agreed to furnish a competent person to make up the books in complete form and to furnish acid and all supplies. Under this method about 60 to 70 cows can be tested per day and records put in the books.

During the year 35 herds, totaling 664 cows, have been on record. A purebred bull was used with 25 of these herds. Seventeen counties have dairy associations. There were 265 dairy club members, 31 of whom made full reports and 82 partial reports.

BUILDING AND IMPROVEMENTS

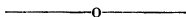
Very little building has been done during the past year. Plans were furnished six dairymen for new buildings and to two dairymen for remodeling old dairy buildings. Plans were also furnished four dairymen for milk houses.

COUNTY DAIRY ASSOCIATIONS

Seventeen counties have organized dairy associations, some of them accomplishing a good deal while others have made no material progress. The Garfield County Dairy Association was organized last February. Previous to this no dairy extension work had been done in the county. During the year the association has taken over the milk supply of the city of Enid, a city of 16,000 persons. For the past four months the cooperative dairy has been functioning in good shape.

CONCLUSION

During the year Mr. Radway reports that he spent 168 days in the field and 135 in the office. There were 41 official calls at the office and 83 official telephone calls. He wrote 1209 letters and sent out 929 circular letters and 275 bulletins. He made 117 visits to county agents and 257 visits to farms, gave 29 demonstrations at which there were 1361 people, made 96 addresses at which there was a total attendance of 16,005. In the discharge of his official duties he traveled a total of 18,482 miles.



LIVESTOCK EXTENSION WORK

PROJECT NO. 13

For the purpose of encouraging the production of more livestock in all parts of the State where the feed situation would justify, and to encourage the production of better livestock in all parts of the State, and to assist county agents in the solution of difficult problems connected with the production of livestock throughout the State, a project in livestock extension work was arranged. Mr. R. W. Clark was selected as the leader of this project and began his work December 10, 1920. Mr. Clark submits the following summary of the work accomplished:

LIVESTOCK MEETINGS, SALES, ETC.

During the year I attended and took part in 14 livestock meetings and sales in the western and northern parts of the State and talked mainly upon better and more liberal feeding. Purity of breeding was emphasized but those things that concern the average farmer, as providing feed, water and care, received most attention. Judging demonstrations were given at all meetings and sales where possible.

The county agent of Beckham county conducted a purebred sire crusade during August in his county. Meetings were held at four different points with fair attendance. At these meetings a multigraphed statement, showing Oklahoma to be an unlimited market for purebred stock, was given to every person present. This statement contained suggestions on the care and feeding of livestock.

In my travels over the State I find that the beef breeders may be divided into four classes and each will require different kinds of extension work.

1. The professional purebred breeder who gives all his time and energy to producing sires.
2. The farmer who runs a small herd with which to supply his table with milk and butter, and have a few steers to sell.
3. The large farmer who has some range, runs a half hundred or so of cows, hand feeds during the winter and sells his calves at all seasons the best he can.
4. The large operator who runs his herd entirely or almost entirely on the range and feeds very little, if any.

We have projects now in cooperation with some farmers in class No. 2, and will aim to work with the other classes as time goes on. The work now being done will be discussed further on in this report.

RAILROAD MEETINGS

During the year I gave 21 days to meetings conducted by the Rock Island Railroad. These meetings were held in the following counties: Caddo, Kiowa, Greer, Grady, Stephens, Jefferson, Grant, Garfield, Noble, Kingfisher, Canadian, Johnston and Pittsburg. My subject was mainly swine production but I talked also on dairying, sheep husbandry and other similar allied subjects. When I had the opportunity I gave demonstrations in judging.

BOYS' AND GIRLS' CLUB WORK

While this has not been my main line of work, I have assisted with it at every opportunity as it is the foundation of future work. I have talked it to the grade and

high school children, have judged their stock at fairs and have talked to them on all phases of the work at their meetings. I have assisted with the work in the following counties: Alfalfa, Garfield, Carter, Major, Pittsburg, Muskogee, Custer, Beckham, Pushmataha, Choctaw, Coal, Dewey, Adair, and Pawnee.

EXTENSION SCHOOLS

In this work I aim to show the similarities in the composition of plant and animal life, give the requirements of animal production and step by step teach the farmer the need of producing proper foods for his stock, and teach him to intelligently balance rations for his livestock. I have put the work in such simple form that any really interested farmer can work out rations to his own satisfaction. He can thoroughly learn the method in one to two days.

In judging livestock I teach the fundamentals and aim to instruct the farmer in such a manner that he can select any class of animals without assistance, and at the same time I try to instill confidence and enthusiasm.

During the year I held schools at Ardmore, Ringwood, McAlester, Warner, Atoka, Fairview and at Heisel Chapel in Grant county. Last winter we aimed to hold four day schools but by making certain changes in the methods of teaching, this year the length of time will probably be reduced to two days.

FAIR WORK

During the fall just closing I judged fairs in the following counties: Washita, Atoka, Pittsburg, Adair, Dewey, Logan and Coal. Dewey county had two fairs which made a total of eight county fairs judged. Without exception, I have always made a school of the fairs by giving reasons for my placing and by giving instructions in feeding.

PROJECT PLANS FOR THE YEAR 1921-22

A. General Animal Husbandry.

This covers all the miscellaneous work not covered by other definite projects.

B. Cooperative Marketing of Livestock.

This plan of work has been adopted and signed by the agents in the following counties: Garfield, Woodward, Beaver and Major.

Major county has already done considerable shipping. From March 2 to July 7, 23 carloads of stock had been shipped but the records of one load have been lost and the results cannot be given in full. In the 22 carloads, 923 head of hogs and 260 head of cattle were sold. This work has developed a market and is encouraging production. It is the only market that the farmers really have and they come from surrounding towns at distances of 40 miles. Farmers think highly of this system and have only words of praise for it.

I have visited the association and county agent twice since July 1 and have given suggestions regarding the work. I have also written to the county agent recently regarding the work, but as I have received no reply, I do not know what results have been secured to date. The "Oklahoma Farmer" of November 10 says that a later report states that more than 50 cars of livestock have been marketed up to November 1.

During the year a circular and a poster were issued on Cooperative Marketing of Livestock and they have been distributed to all county agents.

C. Cow, Sow and Hen Project.

This project has been adopted by Jefferson and Garvin counties. In Jefferson county, A. L. Keller of Ryan is the party through whom the work is to be done and in Garvin county it is Scribner Brothers of Mayesville.

D. Extension Schools.

Agents in several counties have asked for this work and plans have been signed by the agents in Okfuskee, Love and Custer counties. The results secured in project demonstration work depended almost entirely upon the county agents. The specialist may plan the work in cooperation with the agents and do everything possible to

carry it through, but in the last analysis the success depends largely upon the county agents.

COOPERATION WITH OTHER DEPARTMENTS AND WORKERS

The writer has had the hearty cooperation of all workers in this and other departments. There is a spirit of good fellowship and cooperation everywhere. Realizing the value of the home, proper food, clothing, etc., he has boosted club work and everything else that is elevating to young people. So far as the writer knows, there is the closest of cooperation between him and all members of the Department of Animal Husbandry.

In the discharge of his official duties the leader of this project spent 256 1-2 days in the field and 45 1-2 in the office, he wrote 151 official letters, sent out 34 bulletins, made 95 official visits to county agents and made 154 farm visits, gave 35 demonstrations with an attendance of 4955, made 165 addresses with a total attendance of 20,066, traveled 13,848 miles by rail and 3769 by automobile.

The following are the counties in which work was done: Oklahoma, Woods, Garfield, Carter, Johnston, Major, Caddo, Kiowa, Greer, Pittsburg, Muskogee, Tulsa, Grant, Custer, Atoka, McClain, Alfalfa, Beckham, Pushmataha, McCurtain, Choctaw, Harmon, Jackson, Blaine, Woodward, Texas, Cimarron, Beaver, Harper, Logan, Kingfisher, Osage, Stephens, Jefferson, Coal, Okfuskee, Washita, Cleveland, Dewey, Pottawatomie, Adair, Pawnee, Love and Garvin.

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EXTENSION WORK IN AGRONOMY

PROJECT NO. 14

Mr. W. J. Green, the Extension Agronomist, assumed his duties on August 23, 1921. As this was a new position in the Extension Division, considerable time was spent in getting familiar with conditions and outlining the lines of work to be pursued. The Farm Congress and Agents' Meeting in August and the county and State fairs in September afforded an opportunity to do so. As no results have as yet been obtained, this report must necessarily be concerned chiefly with an outline of what is being started.

It was decided to work along the following lines:

1. Soil Fertility.
 - a. Commercial fertilizers.
 - b. Barnyard manure.
 - c. Legumes.
 - d. Lime.
2. Farm Crops—Cultural methods, variety tests.
 - a. Corn.
 - b. Cotton.
 - c. Wheat.
 - d. Other small grains.
 - e. Alfalfa and sweet clover.
 - f. Other feed and forage crops.
3. Seed Certification.
Conducted through the Oklahoma Seed Growers' Association.
4. Farm Management.
That part of farm management that is closely connected with agronomy.
5. Miscellaneous.
 - a. Fairs.
 - b. Short courses.
 - c. Club work.
 - d. Publications.

SOIL FERTILITY

In the work with fertilizers an attempt is being made to have demonstrations in various parts of the State. These demonstrations are in the nature of tests to de-

termine the plant food requirements of the standard farm crops in different types of soils and under different climatic conditions. Most of these demonstrations are on a uniform basis. A portion of the field is divided into plats which are treated as follows:

Plat No.	Treatment
1	Check—no treatment.
2	Acid phosphate.
3	Ammoniated phosphate 2-12-0.
4	Complete fertilizer 2-12-2.
5	Barnyard manure.
6	Barnyard manure and acid phosphate.
7	Check.

Demonstrations according to this plan have been started with wheat in Mayes county in the soft wheat belt and Grant county in the hard wheat section. Demonstrators for tests with spring crops including cotton, corn, oats, peanuts and grain sorghums have been enrolled in Atoka, Noble, and Payne counties and arrangements have been made with county agents to conduct such tests in Marshall, Okfuskee, Canadian, McClain and Mayes counties.

Arrangements for demonstrations in the use of lime on acid soils are being made in Atoka, Mayes, Okfuskee, Payne and Alfalfa counties. Before a test with lime is started, the soil is tested with a Truog tester to determine the degree of acidity. A portable set of apparatus is carried and the tests are usually made out in the field. Soils have been tested by this method from Mayes, Atoka, Wagoner, Alfalfa, Grant, Noble and Payne counties. In many cases it has been found that persons wanted to use lime on soils that showed no indications of acidity when tested.

FARM CROPS

Demonstrations in seed bed preparation, seed selection, planting, cultivation and harvesting as well as variety tests are conducted in counties where the county agents request the cooperation of the Extension Agronomist. The work of enrolling the demonstrators and outlining the methods of procedure is to be started during the early part of the coming year. Demonstrations with wheat are already being conducted in Garfield county. No attempt is made to make recommendations to a demonstrator until a visit has been paid to his farm and the actual conditions have been learned.

SEED CERTIFICATION

This work is conducted through the Oklahoma Seed Growers' Association. This association was organized in 1916 but on account of not having a field man who could do the inspection work, very little seed certification has been done. With the employment of an agronomist in the Extension Division who acts as secretary of the Seed Growers' Association, it is hoped that a start can be made in this work during the coming year.

RULES FOR CERTIFYING SEED

The following rules for certifying seed have been drawn up and approved by the directors of the association.

1. Only certified seed grown by a member can be sold under the name of the Oklahoma Seed Growers' Association.

2. In order to be certified, the seed must be inspected in the field by the secretary of the association or his authorized representative. After harvest a sample of the seed must be sent to the secretary for further inspection. This sample must be accompanied by a certificate from the State seed analyst, giving purity and germination tests. In the case of corn and grain sorghums, a sample of both seed and ears, or heads, must be submitted to the secretary.

3. Seed shall be certified as "Pedigreed" or "Improved".

4. Pedigreed seed shall be descended from a single plant and increased without admixture of other varieties or strains and which meet the other requirements for certification.

5. Improved seed shall be seed of a recognized variety which meets the requirements for certification.

6. To qualify as pedigreed or improved seed, the stock must have a high standard of purity and must conform to the Oklahoma Seed Law in all particulars.

MISCELLANEOUS

Fairs. A large part of the time during the months of September and October was spent in working with district, county and State fairs. District fairs have been judged at Braman, Newkirk, Perkins, Henry Township in Payne county, Hillsdale, Douglas, Jet and Carmen. County fairs have been judged in the following counties: Washington, Wagoner and Noble. At the Oklahoma Free State Fair at Muskogee assistance was rendered in judging the cotton in the open classes.

Club Work.—During the State fairs at Oklahoma City and Muskogee, work was done with the fair schools. This work consisted of conducting grain judging contests, giving instructions in judging work and assisting with the general management of the schools. The crop judging work was also handled at the Marshall county club school at Madill. It is planned to assist the Club Department in the crop club work as much as it is possible to do so without neglecting the adult demonstration work.

Meetings.—As far as possible, the agronomy extension work is conducted by actual field demonstrations and not by talks and addresses. A certain amount of the latter work, however, is necessary. During the time covered by this report addresses have been made at meetings at the following places: Madill, Hillsdale, Muskogee, Oklahoma City, Okemah, Newkirk and Jet. Demonstrations of various kinds have been given at Jet, Carmen, Atoka county, and Madill and Mayes county. These public demonstrations consisted for the most part of soil testing and seed selection.

Publications.—Articles have been written for each number of the Oklahoma Extension News. A circular on small grain culture for club members is being written and will be ready for publication in the near future.

Since beginning the work on August 23, the extension agronomist has worked 83 days, 46 in the field and 37 in the office. He has held 194 consultations at the College, written 142 letters, made 18 visits to county agents and 59 to farmers and demonstrators and 37 other official visits. He has made 12 addresses with a total attendance of 1525, given 7 demonstrations with an attendance of 153, judged at 13 fairs, traveled on official duty a total of 3688 miles.

FARM ENGINEERING

PROJECT NO. 16

The frequent persistent calls from county agents and citizens from all parts of the State for assistance on farm engineering problems seemed to make necessary the employment of an Extension Farm Engineer, which was done in August, 1921. W. H. McPheeters, a graduate of this College and a member of the engineering faculty of the Texas A. and M. College, was employed for this work. The following is Mr. McPheeter's report to December 1, 1921:

The last report made on Farm Engineering extended to June 1, 1920. The resignation of M. R. Bentley left this position vacant until August 20, 1921, when I took up the work. I have now been with this work a little over three months and this report will cover the period from August 20 to December 1, 1921.

The field of work covered by the Farm Engineer may be divided into four general classes:

1. Land Reclamation.
 2. Farm Buildings.
 3. Home Conveniences.
 4. Farm Machinery.
- Drainage. Farm homes.
 Terracing. Barns.
 Irrigation. Hog-houses, etc.
 Water supply. Gas engines.
 Sewage disposal. Tractors.
 Lighting plants, etc. Farm implements, etc.

Although the fields covered in Farm Engineering are many the calls so far have been mainly for terracing. These calls have been so many that all could not be answered at once but are booked and will be taken care of in turn. There have also been several calls for drainage work and a few for irrigation and farm buildings.

TERRACING

Terracing is one of the most urgent needs of central, southern and eastern Oklahoma. This need is also beginning to be recognized by the farmer. Hence, the many calls. A good many farmers who have rolling and hillside farms have begun to realize that they must do something to save their soil or quit farming. There are a great many farms in the sections of Oklahoma mentioned that are almost worthless now and many more are becoming in that condition. Terracing is the only way to save them and I am glad to notice that the farmer is beginning to realize it, although many are slow to act. However, it will be some time before all the farms that need terracing will be terraced. We are succeeding in getting a few of the best farmers in each county to terrace their farms and from these demonstrations hope to get a majority to take up the work soon as they see the benefit. Quite a number of boys are taking a great interest in the work. I have assisted in a good many terracing demonstrations but unfortunately, could only lay out the terraces and size up the field for the ground has been so dry and hard that we were unable to throw up the terraces. However, in a few cases we have managed to build the terraces. From the interest shown at the demonstrations it is almost certain that the work will be carried on. Special effort has been made to get the county agent in each case acquainted with the work sufficiently to give the farmers help and in nearly every case the agent stated he would be able to assist the farmer a great deal in this line of work. Nearly all the agents visited have shown a great deal of enthusiasm for the work and are anxious to extend it in their counties. The opportunity has been had of talking to several schools on this subject and they seemed interested in the work.

DRAINAGE

I find that quite a lot of drainage work is needed in Mayes county and am sure in many other counties that have not been visited. Sloughs along creeks and rivers in many parts of the State need to be drained. We have also worked on two hillside seeps. So far, tile drains have not been advocated to any extent except where absolutely needed for the reason that the people are not able to put them in. Several men have started tile drains but most of the drainage work done so far is open ditches. I feel that later on as the farmer gets in better shape financially he will put in more tile drains.

From observation, it is believed that farmers will become interested in drainage for they already know that they cannot raise anything on the wet, sour land and are anxious to get the land in condition to raise good crops.

IRRIGATION

No work in irrigation has been done so far but a few inquiries have been made. I feel more disposed to discourage it in most cases rather than encourage it, for I do not believe it will pay the average farmer in Oklahoma to try to irrigate his land. However, there are a few places where it would pay to irrigate.

HOME CONVENIENCES

There is a great need for home conveniences all over the State. However, very little work along this line has been done for two reasons. First, the time has all been used on the very urgent need of terracing which must be done at this season of the year. Second, it is a poor year to try to get the farmers interested in something that costs money. Hence, have gone slowly along this line of work so far, but expect to push it forward just as soon as the time is ripe. I hope to be able to do some of this work in the spring, especially through bulletins.

FARM BUILDINGS

Nothing in farm building work other than answer the direct calls has been done so far. Several calls for various farm buildings have been made. Some blueprints

which are on hand have been sent but have had no time for making new designs yet. It is hoped that a great deal of this work can be handled through bulletins and blueprints. I have visited a few farms and helped plan farm buildings and arrangements. This farm building work will grow as time goes on.

In the discharge of his duties the farm engineer has traveled 3700 miles, written 77 letters, visited 12 county agents and 31 farms. He has given 25 demonstrations at which 310 persons were present, addressed nine meetings with an attendance of 450, sent out 125 circular letters, five bulletins and 10 blueprints. He has had 62 office consultations.

HORTICULTURAL EXTENSION WORK

PROJECT NO. 18

D. C. Mooring, the leader of this project, submits the following report of his activities:

The majority of the Extension Horticulturist's time during the past year has been devoted to horticulture from a home standpoint, including the home garden, home orchard, fruit and potato clubs and home beautification work. Commercial horticulture has received its proportional time. The commercial phases include tree and small fruits, Irish and sweet potatoes and trucking. This phase of horticulture seems to be growing and if gone into conservatively should pay.

HOME GARDENS

While Oklahoma ranks as high as any state in the relative per cent of gardens made by both town and rural people, much can be done to improve them in the way of fall plowing, early planting, raising good sized and properly hardened plants and proper selection of vegetables for fall gardens. Many of the demonstrators to whom cabbage seed was distributed last fall by the county and home demonstration agents made remarkable success. This was due largely to the mild winter. Many plantings were made in late September and early October in the open ground and the plants lived through the winter without any protection, maturing into good early cabbage heads.

Seed from wilt-resistant tomatoes furnished by the U. S. Department of Agriculture was distributed to about three hundred gardeners by the home demonstration agents. Where accurate reports have been received the results have been very favorable. This has been especially true in tests conducted by the Horticultural Department here at the College.

Demonstrators with Texas Bermuda onion seedlings report good results, these onions being large, mild and early. The general objection is that Bermuda onions do not keep very well. This difficulty is overcome by proper storage. One demonstrator keeps his onions successfully by placing them one layer deep in elevated slatted bottom crates. Texas Bermuda onion seedlings are becoming more generally planted in Oklahoma each year and promise to take the place of sets to some extent.

HOME ORCHARDS

The 1920 census shows that there are 65 million less apple trees in the United States than in 1910; the same census shows 48 million less peach trees than in 1910. In Oklahoma there has been a decrease in 10 years of 1,631,882 apple trees, 1,936,618 peach trees, 178,392 pear trees, 91,426 plum trees, 49,450 cherry trees and 246,595 grape vines. These decreases have occurred in spite of the efforts of the extension force in the State. It is hoped to stimulate interest in the home orchard through the fruit club work. The enrollment in the fruit clubs for 1921 was 655. The fruit club exhibits at the fairs this fall were fair.

The calls for pruning demonstrations in the spring were more numerous than could be taken care of. A severe late freeze killed practically all the fruit in the State and there were no subsequent requests for assistance with tree fruits and there were but few calls for spraying demonstrations.

From results obtained it seems that Paradicholoro-benzene is the practical and

economical treatment for peach tree borers in peach trees six years old or older. Tests conducted this spring in Logan and Tulsa counties gave from 90 to 100 per cent control. This department has fall demonstrations running in Logan, Tulsa, and Lincoln counties at present with Paradichloro-benzene as a control measure for the peach tree borer.

This spring and fall some special campaign work was done in behalf of home strawberry patches. Records were secured of 150 plantings being made in Mayes county, 35 in Latimer and 34 in McCurtain county.

The plantings of more small fruits such as grapes, blackberries, dew berries and strawberries (in the moister sections of the State) is being recommended. The canning club girls are being encouraged to make plantings of a small fruit, blackberry, dewberry, strawberry or currants each year, or at least increase the size of the planting already started. During the year 57 blackberry and 60 dewberry plantings have been made by club members, who won the plants as prizes on their canning club work. The plants were donated by Oklahoma nurserymen.

COMMERCIAL FRUIT GROWING

In the southern tier of counties a few peaches escaped the late freeze and the surplus was marketed for a good price, ranging from \$1 to \$2 per bushel. The apple crop in the central and northern part of the State was comparatively light but sold for \$2 to \$3 per bushel. In spite of the freezes good returns were received from strawberries in Mayes and Pushmataha counties.

From this year's experience it seems that grapes will come as near giving annual returns as any fruit. In several sections of the State grapes were killed back twice this spring and a third set of blooms were produced, maturing a small crop, which was sold for five to seven cents per pound. The attacks of the grape leaf rollers were unusually bad this year. Commercial strawberry plantings have been made in Ottawa, Craig, Mayes, Adair, and McCurtain counties. Apple plantings are being increased in Adair county. On account of the Welch grape juice plant being established in northwest Arkansas, commercial grape plantings are being made in northeast Oklahoma.

SWEET POTATOES

The potato club work continues to be very satisfactory. The enrollment in the sweet potato club this year is 711 as compared to 176 last year. Two other gratifying points aside from increase in enrollment in the sweet potato club are that the club members are getting purer seed as to variety and disease and are learning how to grade the potatoes.

IRISH POTATOES

Demonstrations were again carried on in cooperation with County Agent E. A. Kissick of Okfuskee county on the farms of E. P. Garrison, Okemah, and Camp Brothers at Castle. In the Garrison demonstration Hill select Early Ohio seed from fall crop of 1920 gave an average increase of six and one-half bushels per acre over field run seed. Early Ohio certified seed from Minnesota yielded 48 bushels per acre, while Early Ohio fall seed (1920 Okfuskee county) averaged 50 bushels per acre. The potato demonstrations at Camp Brothers were on a dark sandy loam river bottom soil. Hill select Early Ohio seed from 1920 fall crop gave an average increase of six bushels per acre over field run seed. Early Ohio fall seed (1920) gave an average increase of 24 1-2 bushels per acre over fall (1920) Triumph seed. Early Ohio certified seed from Minnesota yielded 77 1-2 bushels per acre, while Early Ohio fall seed (1920 Okfuskee county) yielded 78 1-2 bushels and Triumph fall seed (1920 Okfuskee county) yielded only 48 bushels per acre.

CANTALoupES

McCurtain county took up the growing of cantaloupes last spring on a commercial scale. Conditions were favorable throughout the growing season and good melons were produced. On account of improper harvesting, grading, packing, marketing and excessive freight rates the growers did not make any money.

CONCLUSION

In the discharge of his duties the leader of this project traveled 16,661 miles, wrote 628 personal and 305 circular letters, made 94 visits to county agents, held 42 demonstrations and addressed 116 meetings with an attendance of 7394.

COTTON CLASSING WORK

PROJECT NO. 20

The cotton classing work on the whole did not prove as popular during the crop season of 1920 as it had been hoped that it would. However, several of the classers and Mr. C. F. Mitchell continued the work until the end of the fiscal year when it was discontinued. After the cotton marketing season was over and during the last few months of the fiscal year some very valuable work was done by Mr. Mitchell and the cotton classers in assembling scattered lots of cotton and holding public cotton sales. Mr. Mitchell and the classers arranged these sales, had the cotton shipped to convenient points, advertised and conducted the sales, all of which were very satisfactory.

As the Oklahoma Cotton Growers' Association with its membership of 35,000 cotton growers had agreed to class and sell all the cotton of its membership, it was thought not wise to continue the cotton classing work, as the need for this kind of work would seem to have been filled in the organization of the Cotton Growers' Association.

In the discharge of his duties as leader of this project between January 1 and July 1, 1921, Mr. Mitchell reports having written 465 letters, sent out 975 circular letters and traveled 7203 miles.

RODENT ERADICATION

PROJECT NO. 21

This work was carried on in cooperation with the Bureau of Biological Survey of the U. S. Department of Agriculture, Mr. B. J. Melton, Biological Assistant, having charge of the work with headquarters at El Reno, Oklahoma. The following is Mr. Melton's report for the year ending November 30, 1921:

This report covers the third year of rodent control operations in Oklahoma. When first started this work was confined to operations on Federal lands on the Fort Sill Military Reservation, the Wichita National Forest and Game Preserve, and the Rainy Mountain Indian School at Gotebo, Oklahoma. The Rainy Mountain Indian School lands were completely cleared of prairie dogs but owing to a shortage of funds the other work was not completed. There are still some prairie dogs on the Fort Sill Reseryation and on the Wichita Forest but they will be cleaned up before the end of the present fiscal year if nothing unforeseen happens. The second year of the work was devoted largely to extension work in cooperation with the Oklahoma A. and M. College. A law came into effect at that time which compelled land owners to kill the prairie dogs on all land owned by them and provided that counties where such lands were situated should furnish a poison for this work to the land owners at actual cost. We cooperated with the counties in mixing and dispensing this poison with excellent results as is shown by the last annual report on this project. This report shows the development of the work since then and though some phases show a decrease others show an increase which will more than offset the decrease. The various phases of the work will be discussed under the headings of prairie dogs, pocket gophers, rats and miscellaneous.

PRAIRIE DOGS

The law under which our work in Oklahoma was conducted last year set a time limit in which the land owners were to kill the prairie dogs. The time limit was July 1, 1920 and all dogs not killed by that time were to be killed by the sheriff and the costs of such killing to be charged up against the land as taxes.

Because of so much State and Indian land infested with prairie dogs a great many farmers would not kill their dogs if their land adjoined such State or Indian land. At the expiration of the time limit the county commissioners and the sheriffs failed to fulfill their part by killing the dogs as provided by the law. They were in a measure justified in this since the law did not affect the State and Indian lands and these lands would be centers for reinfesting the privately owned lands. As a result there is now no incentive for a man to kill his prairie dogs other than that he will save money thereby. It is a fact, though regrettable, that it is necessary to compel some people to do things for the community good even though they themselves will benefit more from the act than will the community. However, I believe that half of the dogs that are on taxable land, and therefore come under this law, have been killed. But all of the prairie dogs in Oklahoma will not be killed until the State makes provisions for killing them on State land and some provision is made for killing them on Indian land.

In our work previous to the period covered by this report the strychnine was all purchased locally, sometimes at an excessive price. For the work this year arrangements were made with the Experiment Station to purchase the strychnine through the Biological Survey at Washington at the same low price that the Government pays for it. The Experiment Station then sold prepared prairie dog poison at the cost of mixing it or sold the strychnine to counties who wished to have the poison mixed locally and make a further saving. This plan allowed persons to secure the poison from the Experiment Station if their county officials did not have it on hand to supply them.

This prairie dog work reached 32 counties this year. 65,813 acres of actual infestation were treated. A letter with a form for reporting results was mailed to farmers who purchased the poison. It was requested that they fill out the report form and return it in a franked, addressed envelope enclosed for that purpose. Of course not all of these reports were returned but a large number of them were received from each county where work was conducted. Using these reports strictly as a basis we get the following interesting data:

Average number of acres crops protected for each acre treated	3.4
Acres of wheat protected	119,578
Acres of milo, kafir, corn and cane protected	64,218
Acres other crops protected, (including oats, barley, cotton, alfalfa, water-melons, cantaloupes)	37,646
Total acres of crops protected	221,442
Yearly saving per acre treated (by farmers' own estimates)	\$2.39
Total yearly saving	\$155,660

POCKET GOPHERS

The same poison is used in combatting pocket gophers as is used for prairie dogs and it was supplied to the farmers in the same manner. Interest in this phase of our work is not so great as it is in prairie dogs for the reason that farmers do not realize the amount of damage done by them. The labor necessary to kill them is so great that only the progressive farmer can see where it pays, though it does pay. Fourteen counties were reached in this work and a total of 3,422 acres were treated. In this work and in prairie dog work combined, 14,357 quarts of poisoned grain were used, most of which was for prairie dogs. 1,296 farmers used this grain.

RATS

For the past two years in Oklahoma conditions have been favorable to a large increase in the rat population. From reports received there has never been so many rats in Oklahoma as there now are, both in towns and in the country. Because of this great increase our services have been in considerable demand to help control them.

Since rat proofing is the only sure way to be rid of rats, our aim has been to make our campaigns rat proofing campaigns. People do not realize as yet the need for rat proofing, the general idea being that all that is needed is to kill the rats. Our plan is to conduct these campaigns the first year as rat killing campaigns and

by following up each year to finally work into the rat proofing idea as a permanent remedy.

Campaigns in four counties have resulted in the killing of 23,588 rats. This does not include a very successful campaign just closing in Payne county nor does it include rats killed by poison. If we had any accurate way of figuring out just how many rats were killed, I am sure that the number would be double the figure given here. The figure given covers only rats actually accounted for.

CONCLUSION

This work cost the Department of Agriculture \$3,642.56 and the people of Oklahoma \$3,231.56. A part of the Federal money was spent in operations on Federal lands. The amount paid by Oklahoma includes \$600 paid by the Extension Division of the A. and M. College and the balance is the amount spent by farmers in killing rodents.

OUTLOOK

There is every reason to be encouraged by the outlook for substantial progress in county agent work during the next few years. During the world war it was almost impossible to confine our activities to a constructive program of agricultural development. As we work back to fundamentals we find a greater inclination among farmers and farm organizations to undertake a definite program of work for the various counties. These plans of work are being so outlined as to contribute to the permanency of agriculture and to provide a comfortable living for the family independent of cash crops which often are not profitable.

Club work with the boys and girls is gradually being taken over by the public schools. This is as it should be. Since this work is a part of our educational system and must be done through the schools if a reasonable number are to be reached, it is necessary that rural teachers be trained to supervise the club work in their schools. Closer cooperation between county agents and teachers is being encouraged by the State department of education and by the Extension Division.

Among the factors having most to do with the success or failure of county agent work are the educational and natural qualifications of the agents. During the last few months a larger number of men and women with technical training and practical experience have made application for extension work than at any time since the work was started. This encourages us to hope that as time goes on the standard can be raised to the point where more efficient work can be done and better cooperation obtained.

