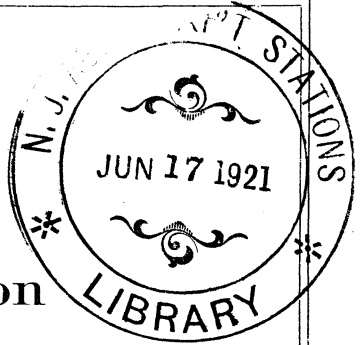


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Annual Report  
Extension Division  
Oklahoma A. & M. College  
1919-1920



Stillwater, Oklahoma



OKLAHOMA AGRICULTURAL AND MECHANICAL COLLEGE  
EXTENSION SERVICE

JAS. A. WILSON, *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*

LETTER OF TRANSMITTAL

Hon. J. W. Cantwell,  
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, 1920, and the report of the activities of the Extension Division for the crop year of 1920.

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

Respectfully,

JAS. A. WILSON,  
Director.

## REPORT OF THE EXTENSION DIVISION OKLAHOMA A. & M. COLLEGE YEAR OF 1919-1920

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The financial report herein given is for the fiscal year ending June 30, 1920. The report of results accomplished under the various projects is for the crop year of 1920.

On account of the general tendency toward lower prices the chief lines of work stressed have been betterment of market conditions and more effective rural organizations. These two most important lines of work were uppermost in the minds of farmers all over the State. Farmers realize as never before the necessity of more effective organization for standardizing farm products and getting them into the hands of consumers at less cost for distribution and marketing.

Taking the State as a whole, crops of all kinds were unusually good. Considerable difficulty and loss was experienced in saving and marketing small grain crops on account of the weather conditions and shortage of cars. The loss from insect damage was very severe. The cotton crop in some counties was almost totally ruined by boll-weevils and boll-worms. The low prices of farm crops toward the end of the season brought consternation to the farm homes of Oklahoma, especially as the cost of production had been higher than ever before.

The condition of farmers who failed to grow their own food and feed is desperate and many are leaving the farms and moving to the towns to work for wages. Farmers who have followed extension teachings and grown plenty of food for the family and feed for the stock are in a position at the beginning of 1921 to tide the present period of low prices and continue to live and produce crops under present conditions.

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

### ADMINISTRATION 1919-20

There were no changes in the general plan of organization until in June, 1920, when the number of District Agents was reduced from six to five, and one of them, Mr. W. R. Shelton, was made Assistant State Agent and given charge of adult demonstration. He was also expected to assist the District Agents in securing financial cooperation in the respective counties. District Agent Markland in the rearrangement of districts was given the largest and most difficult district to cover and was given an Assistant District Agent for the four most northwestern counties in the State. The Assistant District Agent was employed for one-half time; teaching agriculture half-time in the State District Agricultural School at Goodwell, Oklahoma. With this one exception all other employees in the Extension Division are for full time. The Panhandle section of Oklahoma is very difficult and expensive to supervise on account of lack of railroad conveniences. The Goodwell Agricultural School is under the same Board of Regents as is the State Agricultural College and the plan was to coordinate our Extension Work in these four Panhandle counties as closely as possible with the Goodwell Agricultural School.

During the year the Director of Extension was made a member of the Board of Regents of the State Colored Agricultural and Normal University at Langston, Oklahoma. This institution is under a Board of Regents, four of whom are appointed by the Governor of the State, the fifth member being the State Superintendent of Education, who is the chairman. In appointing the Director of Extension a member

of this board, it was hoped by the Governor to better coordinate that work with the work of the Extension Division. The Extension Work in Agriculture and Home Economics for negroes is carried on in cooperation with the State Colored Agricultural and Normal University at Langston.

The work of the Extension Division was carried on under fifteen projects as follows: Administration; Printing and Publications; County Agents; Boys Club Work; Home Demonstration and Girls Club Work; Rural Sanitation; Extension Work for Negro Men and Boys; Extension Work for Negro Women and Girls; Farm Engineering; Hog Cholera Control; Horticulture; Cotton Classing and Marketing; and Rodent Control Work.

The Farm Engineering project and the Hog Cholera Control Work were discontinued on June 1, 1920, on account of lack of Federal funds for Hog Cholera Work and the leader of the Farm Engineering project accepting a higher salary in a neighboring State.

There were mailed out from the Extension Division during the past fiscal year 18,206 personal letters, 226,783 circular letters, 220,088 bulletins, 2,306 packages, 509 posters, 47,259 record books, 2,555 postals, and 284,900 copies Extension News, making a total of 802,606 pieces of mail matter.

All lines of Extension activities are carried on under the direction and general supervision of the Director of Extension, who is joint representative of Agricultural and Mechanical College and the United States Department of Agriculture. The heads of the various Departments of the College are considered final authority on all subject matter problems. The relations between all the various Departments of the College and the Extension Division are very friendly. The desire to cooperate and be mutually helpful is everywhere evident.

The friendly cooperative relations heretofore existing in this State between the Extension Division and the Normal Schools and the teachers of the State continue without interruption. This is due largely to the hearty support given our work by the State Superintendent and the State Board of Education. This is also due largely to the very friendly cooperative relations existing between the Extension Division and State Board of Vocational Education and the vocational teachers throughout the State. If there has been a single case of friction between a representative of this office and a vocational teacher in the State, this office has not heard of it. In fact extension workers and vocational teachers seem to be mutually helpful.

There has been no change in the friendly relations existing between the Extension Division and other organizations and the various departments and colleges of the State.

#### ADDITIONS TO OFFICE EQUIPMENT

The crowded condition of the Extension Division office rooms was relieved somewhat by one-half of the large room on the second floor of Morrill Hall in which ten desks have been placed. These are being used by the Assistant State Agent, the five District Agents, three Specialists and a Stenographer. A large room in the basement of the Old Central building was also assigned to the Extension Division for a store room in which paper, envelopes and other surplus material is stored until needed.

During the year there were added to the office equipment, three typewriters, six two-drawer card cabinets, one stencil cutter, two twenty-seven-tray stencil cabinets, one motion picture machine, one roll top desk.

#### PERSONNEL

On June 30, 1920, there were 71 County Agents, two cooperating agents without salary, 6 District Agents, and one Assistant District Agent for the men's work. There were 40 Home Demonstration Agents, 2 District Agents, and 3 Assistant Home Demonstration Agents for the women's and girls' work. There were also 8 additional women agents employed during the canning season. In the work for negroes there were 9 negro men agents, including 1 district agent, and 4 negro women agents. There were 7 specialists, 1 boys' club agent and 3 assistant boys' club agents and 13 members of the office force. These with the Director, Assistant Director and Assist-

ant Director Home Demonstration Work, constituted the Extension Division. This was a decrease over the same date last year of 6 county agents, 25 assistant county agents, 7 home demonstration agents, 3 specialists and 2 in the office force at the College.

The following is a complete list of all persons employed in the Extension Division during the fiscal year ending June 30, 1920, 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

Jas. A. Wilson, Director of Extension and State Agent.  
 W. D. Bentley, Assistant Director and State Agent.  
 E. B. Shotwell, State Boys Club Agent.  
 T. H. Mittendorf, Assistant State Boys Club Agent. (Resigned)  
 I. H. Needham, Assistant State Boys Club Agent. (Resigned)  
 R. V. Morrison, Assistant State Boys Club Agent. (Resigned)  
 L. E. Rathbun, Assistant State Boys Club Agent. (Transferred)  
 Phil H. Lowery, Assistant State Boys Club Agent.  
 M. W. Chase, Assistant State Boys Club Agent.  
 C. A. Patterson, Assistant State Boys Club Agent.  
 Chas. M. Smith, Assistant in Charge of Poultry Clubs.  
 P. H. Hayes, Assistant Poultry Club Agent. (Resigned)  
 E. O. Edson, Assistant Poultry Club Agent.  
 C. W. Radway, Dairy Husbandman.  
 H. J. Childress, Assistant in Dairying. (Resigned)  
 D. C. Mooring, Extension Horticulturist.  
 M. R. Bentley, Special Agent in Farm Engineering. (Resigned)  
 C. L. Nelson, Special Agent in Hog Cholera Control. (Resigned)  
 B. J. Melton, Biological Assistant.  
 C. F. Mitchell, Cotton Specialist.  
 Miss Emma Chandler, Assistant Director Home Demonstration Work.  
 Dr. D. B. Tucker, Special Agent in Rural Sanitation.  
 Miss Martha McPheeters, Assistant Home Demonstration Agent.  
 Miss Alma Keys, Assistant Home Demonstration Agent. (Resigned)  
 Mrs. Irma Rapp Tolbert, Assistant Home Demonstration Agent. (Resigned)  
 Mrs. Mabel Downey England, Assistant Home Demonstration Agent. (Resigned)  
 Miss Anna Lee Diehl, District Agent.  
 Mrs. Daisy M. Frazier, District Agent.  
 Miss Norma Brumbaugh, Assistant Home Demonstration Agent.  
 Mrs. Nannie Collins, Assistant Home Demonstration Agent.  
 Miss Lethe Morrow, Office Manager.  
 Mrs. Marian Wade, Secretary and Assistant Office Manager.  
 Mrs. V. E. Harris, Bookkeeper and Assistant Office Manager. (Resigned)  
 Mrs. Abigail Morgan, Bookkeeper.  
 Miss Nellie Knight, Mailing Clerk.  
 Mrs. Grace Berry, Assistant Mailing Clerk. (Resigned)  
 Miss Minnie Clausen, Assistant Mailing Clerk.  
 Miss Minnie McCoy, Stenographer.  
 Miss Madeline Ryno, Stenographer.  
 Miss Grace Donart, Stenographer.  
 Miss Ruth Powers, Stenographer. (Resigned)  
 Miss Julia Donart, Stenographer. (Resigned)  
 Miss Ethel Clausen, Filing Clerk.  
 Mrs. Bertha Briggs, Statistical Clerk.  
 Miss Neoma Wallis, Multigraph Operator.  
 Miss Lola Oldham, Stenographer.  
 Mr. P. R. Robertson, Stenographer. (Resigned)  
 B. M. Jackson, District Agent. (Resigned)  
 J. M. White, District Agent. (Resigned)  
 W. R. Shelton, County Agent. (Transferred)

DISTRICT AGENTS

C. W. Callarman, District Agent, has supervision of the following counties: Canadian, Carter, Cleveland, Garvin, Johnston, Love, McClain, Marshall, Murray, Oklahoma, Pontotoc, Pottawatomie, and Seminole.  
 Dan Diehl, District Agent, has supervision of the following counties: Beckham, Caddo, Comanche, Cotton, Grady, Greer, Harmon, Jackson, Jefferson, Kiowa, Stephens, Tillman, and Washita.  
 T. A. Milstead, District Agent, has supervision of the following counties: Beaver, Blaine, Cimarron, Custer, Ellis, Dewey, Harper, Major, Roger Mills, Texas, Woods, and Woodward.  
 B. F. Markland, District Agent, has supervision of the following counties: Alfalfa, Creek, Garfield, Grant, Kay, Kingfisher, Lincoln, Logan, Noble, Okfuskee, Osage, Pawnee and Payne.  
 G. W. Vincent, District Agent, has supervision of the following counties: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Nowata, Okmulgee, Ottawa, Rogers, Tulsa, Wagoner and Washington.  
 W. R. Shelton, District Agent, has supervision of the following counties: Atoka, Bryan, Choctaw, Coal, Haskell, Hughes, Latimer, LeFlore, McCurtain, McIntosh, Pittsburg, Pushmataha and Sequoyah.

## COUNTY AGENTS

Adair	Stilwell	W. M. Moberly (resigned)
Adair	Stilwell	G. E. Davis
Alfalfa	Cherokee	C. A. Patterson (transferred)
Alfalfa	Cherokee	G. F. Newton
Atoka	Atoka	T. J. Waddle (resigned)
Atoka	Atoka	Will Hu'l (resigned)
Atoka	Atoka	A. E. Cook
Beaver	Beaver	J. F. Newsom (resigned)
Bockham	Sayre	T. J. Eldredge
Blaine	Watonga	J. M. Rapp
Bryan	Durant	C. W. Brown (resigned)
Bryan	Durant	G. B. Dunlap
Caddo	Anadarko	I. E. Nutter
Canadian	El Reno	F. K. West
Carter	Ardmore	Carl Russell (resigned)
Carter	Ardmore	J. L. Denniston
Choctaw	Hugo	J. A. Wyatt
Cimarron	Boise City	B. W. McGinnis (resigned)
Cimarron	Boise City	Carl Andrew
Cleveland	Norman	L. E. Bogan (resigned)
Cleveland	Norman	P. K. Norris
Coal	Coalgate	R. C. Blocker (resigned)
Coal	Coalgate	W. T. Yoakum
Comanche	Lawton	J. F. Neeley
Cotton	Walters	S. D. Johnson (resigned)
Craig	Vinita	G. E. Thomas
Creek	Brietow	J. W. Riley
Custer	Clinton	M. A. Watkins (resigned)
Custer	Clinton	I. D. Frantz
Dewey	Taloga	W. F. Porter
Ellis	Arnett	F. F. Parker
Garfield	Enid	D. T. Meck
Garvin	Pauls Valley	T. D. Felts (resigned)
Garvin	Pauls Valley	A. T. Burge
Grady	Chickasha	J. W. Owens
Grant	Medford	E. R. Lawrence (resigned)
Grant	Medford	F. R. Merrifield
Greer	Mangum	R. T. Lee
Harmon	Hollis	W. R. Aull (resigned)
Harper	Buffalo	E. A. Porter
Haskell	Stigler	T. H. Moore (resigned)
Haskell	Stigler	J. L. Schad
Hughes	Holdenville	T. A. Vanderpool
Jackson	Altus	Ben Crawford (resigned)
Jackson	Altus	R. E. Berry
Jefferson	Ryan	C. C. Stinson
Johnston	Tishomingo	J. P. Gray
Kay	Blackwell	J. F. Riddell
Kay	Ponca City	C. S. Merydith
Kiowa	Hobart	O. W. Talley
Kiowa	Hobart	J. R. Spencer, Asst. (resigned)
Kiowa	Hobart	L. E. Charleton
Kingfisher	Kingfisher	J. R. Wiley (transferred)
Latimer	Wilburton	N. C. Ward
LeFlore	Poteau	H. W. C. Shelton
Lincoln	Chandler	J. W. Guin
Logan	Guthrie	A. P. Gregory (resigned)
Logan	Guthrie	J. R. Wiley
Love	Marietta	R. F. Waters
McCain	Purcell	Word Cromwell
McCurtain	Idabel	L. G. Herron (resigned)
McCurtain	Idabel	A. L. Edmiaston
McIntosh	Eufaula	O. L. Wolf (resigned)
McIntosh	Eufaula	J. L. Hendrickson (resigned)
McIntosh	Eufaula	H. L. Bankhead
Major	Fairview	H. B. Bankley
Marshall	Madill	W. E. Martin
Mayes	Pryor	E. Dickerson (resigned)
Mayes	Pryor	C. R. Jackson
Murray	Sulphur	A. J. Stevens (resigned)
Murray	Sulphur	P. W. Swartz (resigned)
Murray	Sulphur	W. T. Phillips
Muskogee	Muskogee	J. M. Daily
Noble	Perry	S. E. Laird
Nowata	Nowata	H. M. Wolverton
Okfuskee	Okemah	E. A. Kissick

Oklahoma	Oklahoma City	C. R. Donart
Oklahoma	Oklahoma City	E. B. Strader, Asst. (resigned)
Okmulgee	Okmulgee	D. P. Trent
Osage	Pawhuska	S. M. McCuiston
Osage	Fairfax	H. E. Wilson, Collaborator
Ottawa	Miami	Jas. Lawrence
Pawnee	Pawnee	M. T. Maud in
Payne	Stillwater	G. W. Musgrave (resigned)
Payne	Stillwater	L. E. Rathbun
Pittsburg	McAlester	E. B. Nelms
Pontotoc	Ada	J. B. Hill
Pontotoc	Ada	B. A. Pratt, Collaborator
Pottawatomie	Shawnee	W. R. Shelton (transferred)
Pottawatomie	Shawnee	E. R. Henson
Pushmataha	Antlers	George Innes (resigned)
Roger Mills	Cheyenne	A. I. Jordan
Rogers	Claremore	S. J. Molby (resigned)
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
Tulsa	Tulsa	J. S. Malone
Wagoner	Wagoner	C. M. Hubbard
Washington	Bartlesville	R. L. Graves (resigned)
Washington	Bartlesville	C. C. Porter
Washita	Cordell	H. Garland
Woods	Alva	W. D. Kennon
Woodward	Woodward	W. F. Gray

COLORED MEN AGENTS

District Agent	Langston	W. A. Hill
Logan	Guthrie	F. W. Kirk (resigned)
Logan	Guthrie	G. W. Powderill
Creek and Lincoln	Chandler	W. M. Mingo
Muskogee and S. E.		
Wagoner	Muskogee	Levi Nelson
McCurtain	Idabel	J. W. Shoals
McIntosh	Eufaula	L. W. Presley
Okfuskee	Boley	J. E. Taylor
Seminole	Wewoka	E. R. Moore
Okmulgee	Okmulgee	P. M. Mann

HOME DEMONSTRATION AGENTS

Atoka	Atoka	Mrs. Elizabeth Ward (transferred)
Beaver	Beaver	Mrs. Mary Newsom (resigned)
Bryan	Durant	Mrs. Kathryn Jackson
Caddo	Anadarko	Miss Vera Miller
Canadian	El Reno	Mrs. Mary Ruff
Carter	Ardmore	Mrs. Minnie B. Church
Choctaw	Hugo	Mrs. Esther Lewis (resigned)
Coal	Coalgate	Miss Grace Clowdis (transferred)
Coal	Coalgate	Miss Pearl Black
Comanche	Lawton	Mrs. Maude Sims (resigned)
Comanche	Lawton	Miss Lenna Speer
Creek	Bristow	Miss Edna I. Whitaker
Custer	Clinton	Miss Lena Gernert
Garfield	Enid	Mrs. A. N. Southwick
Garvin	Pauls Valley	Mrs. Mary D. Ware (resigned)
Garvin	Pauls Valley	Miss Ruth Vermillion (resigned)
Garvin	Pauls Valley	Mrs. Lena Gentry
Grady	Chickasha	Mrs. Nettie Coryell (resigned)
Grady	Chickasha	Miss Carolyn Jones
Grant	Medford	Mrs. Daisy Thomas
Greer	Mangum	Mrs. Elizabeth Dumont (resigned)
Greer	Mangum	Mrs. Helen Gordon
Harmon	Hollis	Miss Margaret Hopkins (resigned)
Harper	Buffalo	Mrs. Ida E. Sweet (transferred)
Haskell	Stigler	Miss Rachel Lena Blair
Kiowa	Hobart	Mrs. Ida Gigray (resigned)
Latimer	Wilburton	Mrs. Elizabeth Ward
LeFlore	Poteau	Mrs. M. A. E. Shelton
Lincoln	Chandler	Miss Blanche Parks (resigned)
Lincoln	Chandler	Mrs. Ida E. Sweet (transferred)
Logan	Guthrie	Mrs. Mary Langton
McCurtain	Idabel	Mrs. Charlotte West (resigned)

McCurtain .....	Idabel .....	Miss Grace Cloudis
Major .....	Fairview .....	Mrs. Flora Bever
Marshall .....	Madill .....	Miss Maude Andrews
Murray .....	Sulphur .....	Mrs. Rosa Stevens (resigned)
Muskogee .....	Muskogee .....	Miss Ethel Phelps (resigned)
Muskogee .....	Muskogee .....	Miss Ruby Mabry
Muskogee .....	Muskogee .....	Mrs. Lulu S. Green
Noble .....	Perry .....	Mrs. Ada B. Sims
Okfuskee .....	Okemah .....	Miss Gladys Gray (resigned)
Okfuskee .....	Okemah .....	Mrs. Anna Richards
Oklahoma .....	Oklahoma City .....	Miss Ita Ross
Okmulgee .....	Okmulgee .....	Mrs. Frances R. McLeod
Osage .....	Pawhuska .....	Mrs. Alma T. McCuiston (resigned)
Osage .....	Pawhuska .....	Mrs. Ginevra D. Lohman
Pittsburg .....	McAlester .....	Mrs. L. H. Breckner
Pontotoc .....	Oakman .....	Mrs. Elva R. Duvall
Potawatomie .....	Shawnee .....	Mrs. V. E. Moore (resigned)
Potawatomie .....	Shawnee .....	Miss Mary McCool
Pushmataha .....	Antlers .....	Mrs. Ella Innes (resigned)
Pushmataha .....	Antlers .....	Mrs. Lillie Wolfe
Rogers .....	Claremore .....	Mrs. Myrtle Watson
Seminole .....	Wewoka .....	Mrs. Ethel Howard
Tillman .....	Frederick .....	Mrs. Eva Mosteller
Tulsa .....	Tulsa .....	Miss Carrie Lovette (resigned)
Tulsa .....	Tulsa .....	Mrs. Mary Meyer
Tulsa .....	Tulsa .....	Mrs. Sada G. Grommet
Wagoner .....	Wagoner .....	Miss Florence Watson (resigned)
Wagoner .....	Wagoner .....	Miss Dadie Duvall
Washington .....	Bartlesville .....	Miss Iva Burch
Woodward .....	Woodward .....	Mrs. Susan B. Gray

HOME DEMONSTRATION SUMMER WORKERS

County	Name
Adair and McClain .....	Miss Kathleen Dorman.
Beckham and Jackson .....	Miss Inez Lewis.
Kay .....	Miss Sylvia Mayer.
Noble .....	Miss Elizabeth Richardson.
Okmulgee .....	Miss Verna Woodworth.
Pawnee .....	Miss Vinita Nelson.
Stephens .....	Miss Esther Martin.
Texas .....	Miss Lucy Swalley.

NECRO HOME DEMONSTRATION AGENTS

Logan and Oklahoma .....	Guthrie .....	Mrs. H. V. Ashcraft (resigned).
Muskogee and Wagoner .....	Muskogee .....	Miss Aquila Chadwick.
Okfuskee and Seminole .....	Boley .....	Mrs. Annie Peters.
Okmulgee and McIntosh .....	Okmulgee .....	Miss Maude Smith.
Lincoln .....	Chandler .....	Miss Camilla Stewart.

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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 21 bulletins and circulars; number of pages, 164. (Total edition 151,000) .....		\$ 814.50	\$4,254.25
B—For printing Annual Report; number of pages, 48. (Total edition, 5,000) .....		120.00	
C—Illustrations, half tones, cuts, etc. ....		118.00	116.75
D—For envelopes, bulletins, circulars, and reports .....			
E—Personal services and expenses of distribution .....		100.00	204.08
Total .....		\$1,152.50	\$4,575.08

The following circulars and other matter were published during the fiscal year ending June 30, 1920:

- No. 36 Breakfast Cereals—Revised.
- No. 50 Vegetable Cookery—Revised.
- No. 67 Information for Cream Producers.
- No. 77 Home Canning and Drying of Vegetables and Fruits—Revised.
- No. 88 Potato Club Instructions—Reprint.



- No. 92 Salads—Revised.
- No. 101 The Local Club Organization.
- No. 104 Home Planning.
- No. 94 Sweet Potato Bulletin—Reprint.
- No. 108 Plans for Organizing Boys' and Girls' Demonstration Clubs.
- No. 109 Orchard Spray Calendar.
- No. 110 Vegetable Spray Calendar.
- No. 111 Irrigation for Oklahoma.
- No. 112 Poultry Houses for Oklahoma.
- No. 113 Hot Bed Bulletin.
- No. 115 Instructions to Fruit Club Members.
- No. 116 Home Sanitation.
- No. 117 Community Organizations.
- No. 118 Annual Report.
- No. 119 The Small Portable Granary.
- B. B-5 Lessons for Better Bread Clubs—September and October.
- C-1 Letter to Canning Club Members.
- 1-C-2 Canning Instructions—April, May and June.
- 1-C-3 Canning Instructions—July, August and September.
- 1-G-1 Cookery Instructions—January, February and March.
- 1-G-2 Cookery Instructions—July, August and September.
- 1-G3 Cookery Instructions— July, August and September.
- 1-G-4 Cookery Instructions—October, November and December.
- 2-G-1 Cookery Instructions—January, February and March.
- 2-G-2 Cookery Instructions—April, May and June.
- 2-G-3 Cookery Instructions—July, August and September.
- 2-G-4 Cookery Instructions—October, November and December.
- Lessons for All Club Girls—November, December and January.
- H-1 Home Making Club Instructions.
- H-2 Home Making Club Instructions.
- B-1 Crop Club Instructions.
- B-2 Corn Club Instructions.
- B-3 Cotton Club Instructions.
- B-4 Grain Sorghum Club Instructions.
- B-5 Peanut Club Instructions.
- B-13 Boys' Club Instructions—April, May and June.
- B-14 Boys' Club Instructions—April, May and June.
- B-15 Letter to Oklahoma Livestock Club Members.
- PB-1 Instruction to Pig Club Members—Breeding Phase.
- PB-2 Instructions to Pig Club Members—Breeding Phase.
- Instructions to Pig Club Members—Fattening Phase.
- Instructions to Calf Club Members—Fattening Phase.
- P-1 Poultry Instructions—February.
- P-2 Poultry Instructions—March.
- P-3 Poultry Instructions—April.
- P-4 Poultry Instructions—May.
- P-5 Poultry Instructions—June.
- P-6 Poultry Instructions—July.
- P-7 Poultry Instructions—August.
- Oklahoma Extension News Volume 1 Number 1 to Volume 1 Number 12, inclusive.
- Livestock Club Premium List.
- Oklahoma Dairy News.
- Postals for Dairy Work.
- Dairy Silo Card.
- Special Circular No. 2 Supplement to Annual Report.
- Circular 114 Annual Report.

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 1919-1920 were as follows:

United States, direct (Farmers Cooperative Demonstration Work) .....	\$35,199.85
Federal Smith-Lever fund .....	80,441.33
State Smith-Lever fund .....	70,441.33
Supplementary Federal Extension .....	40,639.23
College Extension allotment .....	3,759.82
State Funds .....	1,600.00
Appropriations* by boards of county commissioners, boards of education, commercial clubs and others .....	103,627.49
Total .....	\$335,709.05

## FINANCIAL STATEMENT

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

	Total	U. S. D. A.	Supp. Federal Extension	Smith-Lever		*State	College	County and Other
				Federal	State			
Administration .....	\$ 23,817.53	\$ 2,400.00		\$11,242.95	\$10,174.58			
Printing and Distribution of publications .....	5,727.58			1,152.50	4,575.08			
County Agents .....	170,427.72	19,642.14	40,639.23	19,040.60	14,257.58			76,848.17
Boys Club work .....	15,229.29	1,743.84		6,833.94	4,093.35		2,558.16	
Home Economics and Girls Club work .....	84,447.95	10,808.77		22,009.29	23,648.91		1,201.66	26,779.32
Rural Sanitation .....	3,089.24			112.59	2,976.65			
Colored Men and Boys .....	11,880.40	600.89		9,188.26	891.25	1,200.00		
Colored Women and Girls .....	4,954.34	4.21			4,550.13	400.00		
Poultry Club work .....	4,890.60			3,286.58	1,604.02			
Dairy Club work .....	3,603.83			3,600.13	3.70			
Rural Engineering .....	3,144.94			3,144.94				
Horticulture .....	3,641.17			552.60	3,088.57			
Cotton Classing and Marketing .....	726.95			276.95	450.00			
Rodent Eradication .....	127.51				127.51			
Total .....	\$335,709.05	\$35,199.85	\$40,639.23	\$80,441.33	\$70,441.33	\$1,600.00	\$3,759.82	\$103,627.49

State funds received from Langston University for colored County and Home Demonstration Agent work.

## FINANCIAL STATEMENT

Table B.—Summary statement of expenditures by projects, showing classification of expenditures from all funds for extension work\*

Items of Expense	Total	Adminis- tration	Printing	County Agents	Boys Club Work	Girls Club Work	Rural Sanitation	Colored Men and Boys
Salaries .....	\$249,533.45	\$14,630.00		\$138,267.62	\$ 6,034.15	\$62,428.40	\$1,800.00	\$10,905.00
Labor .....	1,098.98	285.53			445.08	345.22		
Printing and Distribution .....	5,727.58		\$5,727.58					
Stationery and small printing .....	3,666.28	2,639.29		16.89	479.00	419.10		
Postage, etc. ....	782.31	431.81		105.08	68.36	89.04	2.15	
Heat, Light, etc. ....	540.00	540.00						
Supplies .....	361.17	227.08			5.80	111.86		
Library .....	79.18	22.08				7.85		
Tools, etc. ....	26.25	6.00				9.25		
Furniture, etc. ....	1,003.83	351.35		66.73	289.50	299.25		
Scientific apparatus .....	262.00	255.00						
Exp. for State Fair School .....	3,759.82				2,558.16	1,201.66		
Traveling expenses .....	33,650.02	2,026.59		12,329.26	3,585.40	8,727.50	1,287.09	374.51
Contingent expenses .....	18.33	2.80				9.05		
<b>Total Expenditures .....</b>	<b>\$300,509.20</b>	<b>\$21,417.53</b>	<b>\$5,727.58</b>	<b>\$150,785.58</b>	<b>\$13,485.45</b>	<b>\$73,639.18</b>	<b>\$3,089.24</b>	<b>\$11,279.51</b>

Table B. (Continued)—Summary statement of expenditures by projects, showing classification of expenditures from all funds for Extension work.

Items of Expense	Colored Women and Girls	Poultry Club Work	Dairy Club Work	Rural Engineer- ing	Horti- culture	Cotton Classing	Rodent Eradic- ation
Salaries .....	\$4,877.50	\$2,620.00	\$2,397.54	\$2,418.26	\$2,704.98	\$450.00	
Labor .....		14.25		8.90			
Printing and distribution .....							
Stationery and small printing .....		80.50	13.00	18.50			
Postage, etc. ....		3.55	35.93	7.04	19.35		
Heat, Light, etc. ....							
Supplies .....			.80	5.05	10.58		
Library .....		.25	48.00	1.00			
Tools, etc. ....			11.00				
Furniture, etc. ....			6.00				
Sci. Apparatus .....			5.25	1.75			
Exp. for State Fair School .....							
Traveling Expenses .....	72.63	2,172.05	1,086.31	684.44	906.26	270.47	127.51
Contingent Expenses .....						6.48	
<b>Total Expenditures .....</b>	<b>\$4,950.13</b>	<b>\$4,890.60</b>	<b>\$3,603.83</b>	<b>\$3,144.94</b>	<b>\$3,641.17</b>	<b>\$726.95</b>	<b>\$127.51</b>

\*U. S. D. A. funds not included in this statement.

## COUNTY AGENT WORK

## PROJECT NO. 3

War emergency funds not being available for the fiscal year 1919-20 it was necessary to discontinue all Assistant County Agents and City Home Demonstration Agents. There were 73 County Agents working at the close of the fiscal year. This was four less than last year. High prices at the beginning of the crop year stimulated the planting of a good acreage of staple farm crops and high yields were made, but at a very high cost. The markets became demoralized in the fall and all farmers suffered heavy losses. One crop farmers were almost totally ruined financially. Those farmers who followed the teaching of the County Agents and produced their own food and feed were in better condition. All farmers, however, are at this time interested chiefly in marketing and distribution problems. For this reason the County Agents have devoted their main efforts to organization work to solve these problems. Special assistance has been given in the organization of the Oklahoma Cotton Growers' Association, which is an association organized to sell cooperatively the cotton which they produce.

The County Agents report having assisted this year in the organization of 278 farmers' organizations with a membership of 2,130.

Two general meetings of County Agents and Home Demonstration Agents were held at the College for instruction in subject matter and study of the practical problems connected with Extension Work. The first of these meetings was held August 24 to 30, 1919, and the second January 19 to 29, 1920. At the first a session was held each morning, at which agents' reports and the discussion of practical extension problems were the leading features. This was followed by lectures, stock judging, and similar work through the afternoon and night each day.

At the January meeting the agents were divided into classes and a program of intensive lecture work on farm crops, horticulture, poultry, dairying, stock judging, and farm mechanics was carried out by the College faculty; the agents all being required to take all the work. Night meetings were held at which practical extension problems were discussed. These meetings were intended to increase the efficiency of the extension workers.

The third Annual Farm Congress and Agents' meeting was held at Stillwater, August 22 to 28, 1920. There were 77 County Agents and 37 Home Demonstration Agents present. There were also present 1,000 farmers and others not residents of Stillwater. Many of the farmers present were delegates from County Farm Councils and other farmers' organizations, to the State Farm Council. The officers of the State Farm Council were re-elected for another year and it was voted to change the name "State Farm Council" to "State Farm Bureau". The County and Home Demonstration Agents held daily sessions presided over by the Director or one of the District Agents.

The Government loans made to farmers in Western Oklahoma last year to enable farmers to purchase seed wheat have been a source of trouble and sorrow this year to a number of the County Agents in that section. The Agents were expected to act as agents for the Government in matters where borrowers were for any reason delinquent either in payments due, reports required or other irregularity, which placed the Agents in a somewhat embarrassing position many times. Whenever the County Agents do enforcement work or collection work or any work of a similar nature, they at once find themselves in a position that reacts to their disadvantage, no matter how worthy the cause.

Livestock disease control work has taken less of the County Agents' time during this past year than heretofore. A very large number of farmers have learned the art of vaccinating for hog cholera, blackleg, and similar diseases and are able to treat their own stock when an outbreak of disease threatens, while other farmers promptly call the local veterinarian when disease appears, so that calls for this kind of work from the County Agent are not so frequent.

There was a very serious outbreak of anthrax in several counties in the east and northeast part of the State, killing a large number of stock before it could be brought under control. The vigorous campaign for its control put on by the State Veterinarian

and his assistants, with such help as the County Agents could give, finally succeeded in stamping out this plague.

A perfect understanding seems to have been reached between the County Agents and the Veterinarians so that friction and hard feeling between them seems to be a thing of the past. For the past year their relations have been most cordial and friendly.

A partial report of the results accomplished by the County Agents during the crop year of 1920 is given herewith.

A large part of the County Agents' time during the past year was spent in organization work and in cooperating with organizations in their several lines of work. Fifty-five of the seventy-one Oklahoma County Agents report having a central county organization supporting the County Agent work. In some counties this organization was the Farm Council or Farm Bureau; in others, the Grange, Farmers' Union, Breeders' Association, Improvement League, etc. The Agents report a total of 579 farm organizations with a membership of 23,760 in their counties. Twenty-three Agents report that this includes Granges and Farmers' Unions and twenty-one Agents report that these are not included. Many of these organizations buy and sell cooperatively. The Agents report that during the year 2,663 cars of farm products were sold and 941 cars of supplies were bought cooperatively and in addition many tons or bushels of products not included. They report a total saving to the farmers on this cooperative business of \$585,459.00. The saving on wheat, corn, mixed feed, cotton seed, coal, and binder twine, alone, through cooperative buying and selling, amounted to \$415,282.00.

The Agents report having 529 corn demonstrations of which 318 made reports. These demonstrators made an average of 46.9 bushels per acre, which was 15.3 bushels more than the average yield for similar land near by. There were 216 kafir demonstrations. The average yield for the 111 reporting was 34.8 bushels per acre. Twenty-nine milo demonstrations yielded an average of 38.5 bushels per acre. Fourteen feterita demonstrations yielded an average of 27.5 bushels per acre. There were 837 cotton demonstrations (247 reporting) which averaged 1,152 pounds of seed cotton per acre. There were twenty-seven tomato demonstrations. Twenty-four of them reported an average of 109 bushels per acre. There were 775 wheat demonstrations of which 224 made reports. The average yield was 26.4 bushels. 181 oat demonstrations were made of which 115 reported an average yield of 49.3 bushels per acre. Eleven rye demonstrators report an average yield of 23 bushels per acre. There were 162 barley demonstrators, of which 134 reported an average yield of 36.4 bushels per acre. A very large percent of the small grain demonstrators tested their seed before planting.

There were 495 demonstrators in the various hay crops; alfalfa leading with 194 demonstrations; sudan next with 125 demonstrations; sweet clover had 75; and sweet sorghum 35. The others were varieties of grasses not generally suitable for Oklahoma conditions. There were 71 peanut demonstrations, 47 of which reported an average yield of 35 bushels per acre and one ton of hay per acre. There were 71 cowpea demonstrations, 53 of which reported an average yield of 13.1 bushels per acre of peas and 1.6 tons of hay per acre. There were 154 sweet potato demonstrations, 83 of which reported an average yield of 173 bushels per acre. There were 184 Irish potato demonstrations of which 90 reported an average yield of 121.5 bushels per acre.

There were 913 orchards pruned and 298 sprayed through the influence of the County Agents. Also 563 orchards were sprayed for borers and 387 new home orchards were planted through their influence.

The agents were all active along livestock improvement lines. Through their influence 39 pure bred stallions, 46 jacks, and 233 brood mares were purchased. In dairy work 194 pure bred dairy bulls and 1,074 pure bred cows or heifers were brought into the counties. The agents also assisted their farmers in selling 467 dairy cattle through individual sales and 612 through group sales. Through their influence 597 grade dairy cows were brought in. 552 cows were tested to determine the profitable milkers. Sixteen agents carry or own a Babcock tester.

In the beef breeds the County Agents influenced the bringing in of 366 pure bred bulls and 1,224 cows or heifers. They assisted the farmers in the sale of 3,015

pure bred beef cattle. 179 dipping vats were built, 18 of which the agents assisted in constructing. There were 809 pure bred boars and 2,854 pure bred sows brought in through the influence of the agents. They assisted the farmers in selling a total of 4,213 pure bred hogs.

The agents influenced the bringing in of 109 pure bred rams and 487 pure bred ewes. They also assisted the farmers in selling 849 pure bred sheep. There were 526 poultry demonstrations. This does not include the work of boys and girls in poultry club work.

In animal disease work the agents were very active, being called on for help whenever any disease appeared. Forty-seven agents own or carry instruments for treating stock for various contagious diseases. As a rule the agent teaches farmers to vaccinate their own stock when disease breaks out, or he puts the farmer in touch with a regular veterinarian. The agents report a total of 183,293 cattle being treated for blackleg, anthrax, ticks, and other troubles. Also 91,783 hogs treated for cholera, lice and other troubles. A comparatively small percent of those were treated personally by the agents.

The use of commercial fertilizers especially in the eastern part of the State has greatly increased during the last year. This is particularly true with regard to using commercial fertilizer for small grain. The agents advised 1,951 farmers regarding the proper use of these fertilizers. There were 206 commercial fertilizer demonstrations with a total of 3,558 acres, resulting in a profit from increased yields of \$53,340.

The agents report a total of 2,373 silos in their counties of which 115 were built this year.

The use of lime on the soil is increasing in Oklahoma. The agents report 133 lime demonstrations of which 72 made reports.

The agents did much effective work in bringing about many different kinds of improvements affecting the farms, farm homes, and the rural communities. The most important of these is the installation of 136 home water systems, 570 home lighting systems, 10,141 homes screened against flies and mosquitoes, 451 sanitary privies erected; 2,433 farmers were furnished with plans for systematic crop rotations. 959 new pastures were established. 216 farmers were induced to drain all or part of their farms. 417 farmers terraced their sloping lands. 91 road improving demonstrations were assisted in. 504 miles of improved road were the result of these demonstrations.

In the discharge of their duties, the agents made 67,959 visits to demonstrators, cooperators, other farmers, business men and club members. They traveled a total of 336,959 miles. There were 67,968 personal calls and 42,604 telephone calls on the agents at their offices or homes relative to their work. There were 4,063 farmers' meetings held under the auspices of the agents. They addressed 6,156 meetings of all kinds with an approximate attendance of 244,407.

As near as can be estimated, the agents spent 35.5 percent of their time at office work and 64.5 percent at field work. They wrote 70,903 official letters and prepared for publication 4,631 articles. They made 6,021 visits to schools relating to work and assisted 414 schools in outlining an agricultural course. They assisted in 72 extension short courses with an approximate attendance of 10,660.

They report 1,097 visits by specialists from the College or Department of Agriculture. 51 agents report holding county fairs and 9,807 demonstrators, cooperators, or club members made exhibits. 6,151 of them won prizes. 13,113 farmers are selecting their planting seed and 2,512 are growing seed of some kind for sale.

The County Agents report 12 negro demonstrations of which all made reports. A total of 408 acres in all crops were grown on these demonstrations. There were fifty negro cooperators in all crops with 800 acres. Thirteen of the negro demonstrators planted pure or selected seed. Seven of these have selected their seed for next year's crop, estimated at 215 bushels. Four negro demonstrators fall plowed their demonstration acres.

For the purpose of giving a better idea of the work accomplished by the County Agents, the following paragraphs from the annual reports of the District Agents are made a part of this report:

## SOUTHWEST DISTRICT

(Comprising Sixteen Counties)

DAN DIEHL, DISTRICT AGENT

The beginning of the year 1920, in the Southwest District of Oklahoma, found the farmers and business men in a very prosperous condition with plenty of feed for livestock. Wheat and cotton had made a good yield in 1919 and prices were good. This had put plenty of money in circulation, had enabled the farmers to pay off the debts contracted in 1917 and 1918. There were many acres of land prepared for wheat that were never sown as the land did not get dry enough to seed. This left an unusually large acreage to plant to row crops.

Every County Agent was busy trying to keep the farmers from planting too large an acreage to cotton, but the high price of cotton in 1919 had made fools of many of the farmers, who planted every acre they could to cotton in 1920. It was impossible for the County Agents and Agricultural Press to keep them from planting too much.

However, the man who has a large acreage of feed stuff is in the same fix; he cannot figure a profit above the cost of production, as there is little market for feed at this time. The man who has a good bunch of dairy cows to eat up the cheap feed and a few hogs is in good shape and will be able to pay his debts.

The County Agents of the Southwest District have talked more dairy cattle all year and the results have been very gratifying.

After closely observing the Southwest for a number of years and trying it out on my own farm, to my own satisfaction, I am sure the dairy cow is the salvation of the farmers, in Southwest Oklahoma. If we can get each farmer to milk a few good cows, keep a good flock of laying hens and a few hogs, we will be doing a great work in Oklahoma.

The Boys' and Girls' club work has, in the past two years, done much for the farmers by growing better gardens, more poultry and canning of fruit and vegetables for family use, while the boys have demonstrated that an acre, planted with good seed, well tended will make a larger profit than five acres poorly seeded and poorly cared for. Also the boys pig and calf clubs have shown the value of good livestock on the farm.

Last spring was so wet, cold, and late and there was so much hail that nearly all the boys and girls, as well as the farmers, were compelled to plant most of their crops two and three times; in fact it made their crops so late that few of the club members had crops matured enough to exhibit at the County and State Fairs. Those who did exhibit had to pick immature stuff and won few prizes.

To sum up the crop condition in the Southwest, will say they have produced the largest yield of all crops, except fruit, ever produced here. Since all were produced with seed, feed, and labor high and scarce, there is not a single farmer who can come out even.

Good dairy cows, sheep and poultry are the needs of these counties. Turkeys do well in Western Oklahoma and farmers should be encouraged to grow more of them. They are valuable in destroying grasshoppers and other insect pests.

Beginning the last of August, the township and county fairs started. This kept me very busy judging for about one month. Heavy rains during the fair at Frederick, Altus, and Elk City very nearly ruined the fair. And at the same time the country was visited by the worst fly pest ever known in this section. They did so much damage to stock that very few herds of cattle were shown at the county and township fairs.

The exhibits of hogs, poultry, and farm crops were perhaps the best ever exhibited in the Southwest District. One cannot help but notice the improvement of the livestock on the farms. Pure bred sires are being used more than ever before and this is having a good effect on the off-spring. Farmers are learning that not numbers but quality counts in profits. Farmers keeping a few head of good pure bred stock are showing a profit over those keeping larger herds of scrub stock.

The Southwest District has in the past two years consolidated many rural schools. This is helping to keep the best farmers on the farms. The County Agents have

cooperated with the County Superintendents in putting in consolidated schools and building up the community centers.

The great need of the Southwest is not so much more production but a better market for what they do produce. If we can by better marketing organizations succeed in getting a better profit for the producer and at the same time sell to the consumer at a reasonable price, cutting out so much profiteering by the middlemen, we will be doing the greatest service possible to all humanity.

Our motto for the next year will be "Better homes, better schools, better churches, better livestock and poultry and diversified crops, cutting down the cotton acreage."

During the year 1920 I have traveled by rail 11,850 miles and by auto, 1,316 miles throughout the Southwest District. I have attended and addressed 161 meetings with an attendance of 13,193 people. At these meetings we stressed better homes, schools, seed, livestock, and poultry, while many of the meetings were along organization lines and better marketing.

### NORTH CENTRAL DISTRICT

(Comprising Seventeen Counties)

B. F. MÅRKLAND, DISTRICT AGENT

The North Central District at this time is composed of the following counties: Alfalfa, Creek, Grant, Garfield, Kay, Lincoln, Major, Noble, Okfuskee, Payne, Pawnee, Woods, Woodward and the Panhandle counties of Cimarron, Texas, Beaver, and Harper, which are under the immediate supervision of an Assistant District Agent.

In supervising the work in this district the District Agent traveled 18,914 miles, made 175 visits to county agents and 235 visits to demonstrators, attended 95 meetings with a total attendance of 6,770, spent 243 days in the field, and 72 days in the office, wrote 354 letters and 75 circular letters.

Each county in the district, except one, has a county agent. Eight of them have women agents, and one, Okfuskee, has a colored agent for negro men and a colored home demonstration agent for negro women, as well as a man and woman agent for the whites. The counties in this district have pledged a total of \$40,260.00 to apply on agents' salaries.

#### ADULT DEMONSTRATION

Crop demonstration consists mainly of wheat, oats, corn, barley, kafir, and cotton; in legumes, sweet clover and alfalfa.

The method of conducting crop demonstrations is gradually changing from that of individual to groups. To the degree that the agent has succeeded in making this change, to the same degree has he succeeded in making this phase of his work interesting and profitable to his farmers. Garfield, Lincoln, Payne and Major counties have made the greatest progress along this line.

Wheat has been the prevailing crop in most of the counties of the North Central District and the all-wheat farmer has been the most difficult farmer to approach as the one-crop farmer usually is. However, the past season the agents have interested him as never before in demonstrations of timely and proper preparation, seed selection, etc., that have proven very valuable and in all of the northwest counties (west of Noble and Kay) they will soon be growing a standard variety and practicing early preparation insofar as weather will permit.

Diversification is being studied as never before, as farmers are realizing that an all wheat crop is hazardous and uncertain as to returns and often unprofitable.

A definite program of selecting seed corn best suited to a given locality was carried out. The Silvermine corn is considered by most agents as best in the eastern counties where most of the work in corn is being done, namely: Okfuskee, Creek, Lincoln, Payne, and Pawnee counties.

Some demonstration work in growing barley for feed has been carried out this year in most all the counties of this district and while the results have been very gratifying, it will take a longer period of time to definitely establish it as a suitable



grain feed crop that would more nearly fit into a program of livestock farming than kafir and oats, on the west, and corn and oats on the east side. The kafir crops, of course, are the dependable feed crops for the west side though there is a limited acreage more suited to corn production even in the extreme dry-land belt. Most all demonstrations in kafir this year have to do with cultural methods, though there have been some new varieties introduced into the State by Government Dry Farms, located in Oklahoma and Texas.

Sweet clover and alfalfa are about the only legumes that have much value on the farms in the North Central District and have had their share of attention by agents in crop demonstration.

Sweet clover, a comparatively new crop, is slowly becoming recognized by livestock men as a valuable asset in crop rotation systems as well as a fine pasture crop. This has and is being brought about through agents demonstrating its value through a maze of prejudice in the minds of the average farmer that it will not grow, and if a stand is procured by accident stock will not eat it, must be overcome by demonstration.

Alfalfa has decreased in acreage in the last three or four years due in part to the insistent demand for more wheat, and partly to the unprofitable livestock market and several other minor causes though an unusual interest is manifest in demonstrations of this crop. Especially is this true where old alfalfa fields have been planted to other crops.

Diversified farming by growing an abundance of feed to maintain the maximum number of livestock is considered safe farming and to this end all agents have been striving. Most of the livestock work is being carried on through organized bodies, of which mention will be made under organization.

The beef breeds of cattle predominate. Many pure bred herds have been started this year and the poorer individuals culled out of the older herds while others have used pure bred sires for the first time. The central counties of the district have made the greatest progress, namely: Grant, Garfield, Noble, and Alfalfa, while the eastern and western counties have more recently started in a systematic manner to improve their beef cattle. Most all demonstrations have had to do with this breeding stock, pasturage, feeding, care, etc.

Dairy cattle are not given the place on the farm they deserve and progress in promoting dairy farming must be slow though it does fit in well and is the most profitable and safe practice that could be followed. Demonstration work must be very largely along the lines desired by those we serve, and as most agents have very little demand for dairy work, this explains the reason for the small amount of this work. Though some good work has been done in most all counties, Lincoln, Payne, Pawnee, Noble, and Major county agents have made the greatest progress in promoting dairying by carrying on demonstrations in feeding, breeding, and testing milk for butter fat. In view of the fact that dairy and poultry products are about the only products that are at this time showing a profit to the farmer, it is evident that these activities will become more popular and a demand develop for more dairy work. Most of this district is well suited to dairying and as the State grows older, so will dairying develop.

The number of hogs has decreased very materially in the past two years due mainly to scarcity and high prices of feed. Very active work in breeding, feeding, and care of hogs has been carried out in Pawnee, Lincoln, Kay, Woodward, Okfuskee, and Noble counties. In all livestock work the value of a pure bred sire has been stressed.

#### CLUB WORK

The club work in the North Central District is in a very healthy condition, most of which is now being conducted through local club organizations with some adult selected as local club leader. In most instances this leader is the teacher in the district school. In some cases, however, a local man or woman is selected. Much of the success of the local club depends upon a wise selection of this leader and each year finds us with a greater number of enthusiastic folks to select this leader from.

County Superintendents and teachers are usually staunch supporters of the club work and are giving their time and energy to its promotion. It is very unusual to find one who is not willing to render every assistance. This makes it possible for the agent to reach a larger enrollment and give such aid that will enable the boy or girl to make a success of his or her undertaking.

The North Central District embraces most of the wheat belt of Oklahoma. The wheat club should be given greater encouragement, except in Garfield county, where Mr. D. T. Meek, county agent, caused his millers and elevator men to become interested in the wheat club to the extent that they furnished seed and aided in enrolling and instructing wheat club members. There were more than 100 wheat club exhibits at the Garfield County Club Show, the largest wheat club exhibit ever shown in Oklahoma. The seed used was Kanred and it is confidently expected by the leaders in the county that the final result will be a standardization of wheat in the county within three years.

Corn club work should not be and is not encouraged except in the eastern counties of the district, but exceptional work in this club was done in Payne, Pawnee, Lincoln, Creek and Okfuskee counties this year. The agents procured uniform seed through local aid and distributed it to club members.

The Cotton Club has about marked time this year in this district, the district being on the northern border or almost entirely out of the cotton belt. Some work has been done by agents providing boys with better seed in Okfuskee, Lincoln, and Creek counties.

The Poultry Club is the most popular club with both the agents and the boys and girls and has made great progress in the district. The school house poultry show has been the means through which the agent has been able to show the value of poultry club work and many of the counties in the North Central District have held these shows this year in every district in the county.

The county superintendent and county agent work in harmony to make these shows a success. The effect of this aggressive club work is being reflected in the improvement of hundreds of flocks on the farms. This is very noticeable in Kay, Alfalfa, Payne, Major and Woodward counties. Mr. Wolf, county superintendent of Alfalfa county, told me that there had been a remarkable change in the quality of and care given poultry in that county due to club work. Mr. A. D. Kersey, county superintendent of Kay county stated that because of poultry club work, hundreds of standard bred flocks were now being kept on the farms in the county. Other counties have made equally as good progress. Every county in the district will hold poultry shows this year.

The livestock club work has made very satisfactory progress in most of the counties this year, particularly is this true of the Pig Breeding phase of the livestock work. There ought to be at least one brood sow on every farm to consume and convert into meat for family use what otherwise might be waste. Agents have interested bankers and others in the "Endless Chain Pig Club" plan, procuring bred gilts and distributing them to boys who had previously enrolled in this club. So popular did this plan become that many of the agents could not find sufficient numbers of bred gilts good enough in quality to supply the demand.

All gilts provided for club members were pure bred and in most instances of very good quality; not that the boy was entering into the "pure bred business" but to teach him that it pays to select stock of known breeding even in meat production. These litters are being carefully culled and a few of the best individuals are being retained for breeding purposes. The remainder are being fattened and will be taken to the Oklahoma Fat Stock Show, which will be held the first of March at Oklahoma City. There they will be exhibited, sold and butchered; a very fitting close of a most worthy project of education through club work. Pawnee, Payne, Lincoln, Okfuskee, and Woodward county agents have made splendid progress with this club this year.

The calf club work has also made very satisfactory progress in most of the counties of the district and similar to the pig club, it calls for careful selection of the members and personal contact in giving directions and instructions. Garfield county has made the greatest progress with this club. At County Agent D. T.

Meek's club show this fall his calf club exhibit excelled that of any other county I have record of, both in numbers and quality.

The sheep club has not been given the attention it should have had in this district except in one county, namely, Garfield, where Mr. Meek interested a number of local bankers in promoting this club. This resulted in the placing of more than fifty head of bred ewes with club members. Woodward and Alfalfa counties have a small number of very successful sheep club members.

#### ORGANIZATION

All counties in the district have an active improved breeders' association and while these organizations propose, as the name implies, the improvement of all seed stocks of both field and livestock, almost all have confined their activities to that of livestock, only. The notable exceptions are Lincoln and Garfield counties. In Garfield county this organization has promoted and adopted a county five year plan of development along all agricultural activities.

In Lincoln county a partial program for the standardization of corn and cotton has been worked out largely through this organization.

Pure bred livestock sales have been held this year in the following counties: Woods, Major, Garfield, Noble, Kay, Pawnee, Payne, Lincoln, and Okfuskee. These sales have stimulated more interest in better livestock than any other method could, and have been a means of distributing many pure bred animals where scrubs had been used before. Noble, Okfuskee and Alfalfa counties have built permanent homes for these sales, while Kay, Garfield, Pawnee, Lincoln and Woodward contemplate building soon. All these organizations are giving valuable assistance to the county agent in promoting livestock club work. In many counties each breeder, agreeing to select some worthy boy, interest him in some livestock club, aid him in procuring suitable stock and advise in the proper breeding, feeding, and care of the animal, has been very active in this work. They have been active in the eradication of livestock diseases.

Many business organizations have been organized this year, mainly cooperative elevators. These organizations pay patronage dividends and while their principal business is that of selling grain, practically all buy things that can be handled by car lot shipments, such as flour, potatoes, and coal, and are rendering very valuable service to their members.

Wheat, the big cash crop of this district, is being sold at less than cost of production and while better economical methods should be used in its production by many producers, yet in the main, producers are using modern methods.

It is manifest that much more thought has been given to production by the grower than he has given to marketing. The big loss he is compelled to take this year has stimulated him to give more thought to the marketing end of his business. The result has been the organizing of the Wheat Growers' Association in every county in the district that produces a large acreage of wheat. They have 2,000 or more members in many of the larger wheat producing counties.

The same reason that prompted the Wheat Growers' Association also prompted the organization of the Cotton Growers' Association, namely: unstable market prices below cost of production.

Unlike the wheat growers, the cotton growers did not deceive themselves into believing that they could, by just banding together with little or no program, except to propose holding the crop until a fair price was offered, succeed in creating a satisfactory market. They have planned a commodity selling organization that will in the end, remove much of the speculation that now prevails in cotton marketing, to the disadvantage of the grower.

All counties in the district having agents held a county fair this fall and all except Woods and Alfalfa are operating under the Oklahoma Free Fair plan. Agents devote considerable time in promoting and conducting these fairs because they are the best source through which they can teach by demonstration, the value of improved seed stock of all kinds. It is the show window through which he is enabled to advertise his wares and is a valuable aid in promoting all that his work stands for.

**NORTHEAST DISTRICT**

(Comprising Thirteen Counties)

GEO. W. VINCENT, DISTRICT AGENT

The beginning of the year 1920 found the Northeast District still in the grip of the high tension caused by the war conditions. Inflated prices of all farm products, of livestock of all kinds, and increased prices of land caused a great deal of restlessness and shifting around among farmers. Many farms changed hands and as much of this section is being farmed by renters, many renters changed homes and in many instances rental rates were naturally increased. Many farms were bought in practically a raw state at prices greatly increased over former years and a great many new homes were built or contracted for in the early part of this season.

A large portion of this district is an extensive oil and gas producing section and never before was so much prospecting in this line undertaken. Greatly increased wages were paid in this line of work for all classes of labor, both single handed and for teamsters, which rendered a very difficult situation for farmers who depended in any way upon hired labor.

The county agents, fortunately, in this section are largely men of long experience in their lines of work, who have been on their jobs in their respective counties for a number of years and we have earnestly advised them through this period to be very conservative and as much as possible hold the farmers in check against any wild adventures or speculative dealings in any way. This made a very difficult task for the agents in most counties as the attractions furnished through oil operations and inflated prices of all commodities drew every kind of investor and speculator to this section of the State.

There being no concrete organization among farmers through which any definite program of activities could be outlined, we simply had to rely on keeping the county agents in one mind as much as possible and inducing them to carry out the same policy in all their activities.

**ADULT DEMONSTRATIONS**

The Adult Demonstration phase of the various county agents has seemed to suffer considerably in the face of changing conditions of the past year.

A number of agents have carried out some very successful demonstrations with legume crops, such as alfalfa and sweet clover, while others have specialized on the use of fertilizers on the small grains such as wheat, oats, and barley. There is a growing demand in this district in almost every county for demonstrations in permanent pastures. Some of the prairie lands are beginning to be eaten out and many farmers are asking for information in regard to grasses or legumes that will stay as permanent pastures throughout a number of years.

The best example we have seen in this line of demonstration is the blue grass pastures on the farm of Mr. Kraemer in Tulsa county, who has blue grass sod which has been successfully grown on the same land for the past six years. The county agents while at the group meeting at Tulsa recently, visited this demonstration and were very much interested and enthused with the success made by Mr. Kraemer in establishing a permanent pasture in this way.

There is a tendency to group the demonstration work more by communities and in community centers in recent years and we believe that this will prove a success if it is carried out carefully in the future.

The organization and supervision of club work in its various lines has seemed to be more difficult in the face of these conditions this year than it has in former years. We believe this was due to the fact that many boys from 12 to 16 or 18 years of age could easily earn fair wages in almost any line of work and it was, therefore, very hard to hold them down to real club projects. However, in some instances some unusual results have been obtained and the boys and girls who receive the proper backing from their parents have made some remarkable gains as well as financial successes out of their efforts.

The pig club work, especially, has been very hard to hold in line under the ever changing and fluctuating prices of hogs and feed necessary for their maintenance. In one or two counties we have noticed over enthusiasm on the part of bankers in the "Endless Chain Pig Clubs", which has caused the county agent considerable difficulty.

We are of the opinion at this time that it is very easy for the county agent to enroll too large a number of members in livestock clubs, owing to the necessary supervision required to make a success in a large percent of the cases.

The agents enrolled principally corn, wheat, and pig club members in this district and in the latter part of the season this year two or three agents have taken hold of the calf club work, principally in the fattening phase. I have cautioned them very closely about launching too extensive a campaign along these lines.

#### COUNTY FAIRS

Nine counties out of the thirteen constituting this district up to July 1, 1920, held county fairs under the County Free Fair Law. The activities in fair work in these counties were principally confined to community and county fairs. All of them made a good showing at these fairs in both adult work and boys and girls club work.

In most instances these county agents cooperated very closely with the Free Fair association in the management of fairs. However, the dates coming so close to the dates of the State Fairs, rendered it very difficult for them to reach the State Fair at Oklahoma City with club exhibits. It was, therefore, decided in our conference to make the principal part of our club exhibit at the Free State Fair at Muskogee the past year.

As a rule, the Fair Association, elected in the different counties, consisting of two members from each municipal township in the county, is very insistent on the county agents lending their entire influence to the upbuilding of the local fair in their respective counties and we find that these men generally are very strong supporters of county agent work. He is, therefore, greatly handicapped in preparing any part of the county exhibits for any State Fair.

#### COOPERATIVE ASSOCIATIONS

We have devoted considerable time and energy in assisting a number of the county agents in the organizing of cooperative marketing associations during the past year. The counties taking the lead in this work are Tulsa, Nowata, Rogers, Ottawa, and Mayes. These counties have organized a large number of cooperative elevator companies, which have handled many thousands of bushels of grain the past season on a successful cooperative basis and at Tulsa and Claremore cooperative stores are being run by these institutions.

#### LIVESTOCK

This section of the State is one of the main livestock regions of the Southwest. There is a great deal of native grass which has never been broken. This is almost a sure feed producing section, abounding with natural water in most sections and the livestock industry has been one of the leading agricultural industries in the past. The opening of the present season found prices of livestock very much inflated. Many herds of cattle were on the ranges which cost war time prices, and during the winter of 1919-20 these cattle were fed the highest priced feed in the history of the country. Corn was being sold at \$2.00 per bushel, cotton seed cake was \$80.00 per ton, hay was \$30.00 per ton and many contracts were let for summer pasture at from \$10. to \$12. or \$14. per head per season. The mid-summer sales of cattle started in on a reduced market which continued to fall and many of these cattle were rushed into market during July and early August in an unfinished condition, forcing the market to a very low figure and causing untold losses to the men who had carried this stock through the winter and summer.

One of the most difficult problems we had to combat in connection with the cattle industry was the desire on the part of speculative interests to carry on livestock

sales in which they undertook to palm off a large number of inferior breeding stock on the public. These speculators would buy cattle in other sections of the country and then go the sale ring route with a paid corps of smooth tongued auctioneers in order to induce those desiring pure bred sires and foundation stock to pay high prices for an inferior grade of cattle. The county agents were cautioned to hold in check as much as possible such activities and in some instances considerable difficulty was encountered along this line.

Wherever Livestock Breeders' Associations had been organized this difficulty was easy to overcome, but if the county agent was found without organized backing, he was almost helpless in the face of such activities.

To control this difficulty, the Improved Breeders' Association in Tulsa, Okmulgee, Muskogee, Osage, Nowata, Rogers, Craig, and Mayes counties organized what is known as the Oklahoma Central Breeders' Association and put on a sale this year, November 24, 25, and 26, at Tulsa, in which there was only the consignment of animals bred and owned by the different members of the above breeders' association.

We encouraged this organization through the several county agents all we could, believing it to be the best route to head off speculation and bring about the improvement of inferior stock in this district.

This sale proved very successful in the distribution of cattle, swine, and sheep and a number of club boys were encouraged by the county agents to make purchases at the sale.

#### LIVESTOCK DISEASES

We have not had any general out-break of livestock diseases which has threatened the entire district this year. An unusually small amount of hog cholera has been reported owing to the previous educational work along this line, which has been carried out by the county agent.

In Osage and Rogers counties there was an outbreak of Texas Fever, caused by ticks, which came from an unknown origin, as this territory is all above the quarantine line, having been clear of ticks for some two or three years.

The most dangerous infection of livestock diseases was in Rogers and Tulsa counties in the form of anthrax. We spent considerable effort on this in cooperation with the county agents and the veterinarians working under the direction of the State Board of Agriculture and were able, by holding a number of meetings, to induce the people to hold this disease in strict quarantine. But at the best it did several thousand dollars worth of damage and heavy inroads on a number of herds of valuable cattle. This outbreak is a continuation of an old infection of this trouble which has been in these communities for the past four years.

#### ORGANIZATION

As stated before, we have but very little concrete organization which reaches all the farmers in this territory. The Farm Councils organized in former years have, for one reason and another, become very inactive and have failed to function.

There is at this present time a very keen desire on the part of many farmers for some sort of an organization that will reach from the grass roots up to National Headquarters. The unusual condition existing in regard to the marketing of farm products has aroused a keen interest on the part of many of the progressive farmers and they are every day expressing their desires to the county agent relative to organized effort. Many are confident that no one local organization can handle the agricultural problems nationally and that a number of different organizations only make the matter more perplexing. We are confident that there is a great field for some outstanding organization which can house the whole project of organization and direct its efforts under one head.

#### COUNTY AGENTS CONTRACTS

The county agent work has, in most counties, been so thoroughly established that we have found very little difficulty in obtaining contracts for their cooperative pay. In some counties there has been a manifested desire on the part of members of differ-

ent excise boards to hold the salaries of the county agents down to an equal amount paid to the average county officer. This has made a more difficult problem to overcome in procuring contracts than we have met with in the different boards of county commissioners. The county superintendent in nearly every county has proven to be a staunch supporter of the county agent, both in the matter of securing funds and cooperation in club work. The county agent in return has always been advised to assist the county superintendent in the up-building of better schools and in many instances has assisted him in the consolidation of school districts in several counties.

At the beginning of the fiscal year, July 1, 1920, the State was redistricted and Osage and Sequoyah counties added to the Northeast District, making in all fifteen counties, namely: Adair, Cherokee, Craig, Delaware, Mayes, Muskogee, Nowata, Okmulgee, Osage, Ottawa, Rogers, Sequoyah, Tulsa, Wagoner and Washington.

Thirteen of these counties have county agents, the two vacant counties being Cherokee and Delaware on the extreme east side. These two counties are very small and have large areas of restricted Indian land which is non-taxable, rendering them very low in taxable valuation and making it very difficult for them to raise their share of the funds for county agent work.

A total of \$31,444.92 was appropriated by the counties in the Northeast District to apply on the salaries of the county agents and home demonstration agents.

We are glad to report that the district from the county agent standpoint is at the present time in a very healthy condition. All the agents are contented and satisfied and are endeavoring to carry on their work in a very systematic way.

During the year closing November 30, 1920, in the performance of his duties the district agent has made 84 visits to county agents, attended 8 demonstrations, attended 74 meetings with an estimated attendance of 2,200; has traveled a total of 14,155 miles; has spent 150 days in the field and 119 days in the office; has written 113 personal letters and 76 circular letters.

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## SOUTHEAST DISTRICT

T. A. MILSTEAD, DISTRICT AGENT

On July 1, I was transferred to the Southeast District to succeed Mr. W. R. Shelton, who had been promoted to Assistant State Agent. This district comprises the following counties, all of which have county agents, with the exception of Pushmataha, which failed to make an appropriation to take care of the work on the plea of low assessed valuations and for the further reason that they needed all available funds for bridge and road construction: Atoka, Bryan, Choctaw, Coal, Haskell, Hughes, Latimer, LeFlore, McCurtain, McIntosh, Pittsburg, Pontotoc, Pottawatomie, Seminole, and Pushmataha.

### SOIL FERTILITY

Realizing that the fertility of the soil is the farmers' stock in trade and that it is impossible for him to get maximum crop yields from a worn out, impoverished soil, we have put much stress on the conservation of soil fertility and have diligently worked, through our county agents, for crop rotation, the growing of legumes, and last but not least for the proper terracing of the sloping lands. The agents of the Southeast District have assisted in terracing 149 farms with a total of 9,787 acres.

### ORGANIZATIONS

The county agents of the Southeast District have assisted in the organization of 138 local and county organizations with a total of 4,086 members. These organizations include Farm Councils, Farm Bureaus, and Farmers' Unions. The last named having more members than the other two combined. The business managers of these organizations bought and sold 89 cars of feed, seed, twine, fertilizers, melons, and cotton for members at a saving of \$44,152.22, which means much to the average farmer when one considers the deflated prices for all farm products.

The tightening of the money market coupled with the draggy prices offered for

farm commodities is proving a strong incentive for organization, especially organization that gives promise of helping the cotton farmer out of the present dilemma.

## CORN

The agents of the Southeast district have devoted much time to the field selection of seed corn and this year personally supervised 155 demonstration plots, representing a total of 2,255 acres that were planted to improved pure seed. The progressive farmers who prepared their land and planted and cultivated their plots as per the suggestions of the county agent were rewarded with an increased yield of 15 bushels per acre more than corn planted and cultivated the ordinary way. The increased yield on the 155 plots totals 33,150 bushels of pure seed, which if sold for seed at \$2.50 per bushel (a low price for good seed) would total \$73,775.00 for the growers.

## COTTON

The good cotton crops of 1918-19, coupled with the high prices received for the fleecy staple, found the cotton tenants, land lords, bankers, merchants, and everybody else on the advent of the year 1920, not intoxicated, but just plain "drunk" on so-called cotton prosperity. The cotton farmers were advised by many of the agricultural agents, some of the farm papers and by most of the bankers that the devastated countries of Europe needed the cotton (which was true then and is now) and that they, the cotton farmers, should grow a bumper crop, and as the work implies, it sure had the "bump" for most all feel or will feel by the time we "settle up" that we have been "bumped off" financially.

## COTTON DEMONSTRATIONS.

The agents for this district have personally supervised 156 plots representing a total of 2,923 acres, which were planted to improved pure seed. These progressive cotton farmers were rewarded with an increased yield of 393 pounds of seed cotton more per acre than were the cotton farmers who planted "gin run" seed and cultivated the ordinary way.

OTHER CROP DEMONSTRATIONS  
(Conducted by Adult Farmers)

Crop	No. Dem. Plots	Acreage	Inc. Yield
Oats .....	39	3,065	11.4 bu.
Barley .....	7	360	13.4 bu.
Irish Potatoes .....	19	61	37.0 bu.
Sweet Potatoes .....	55	243	49.0 bu.

## ORCHARD

The county agents of the Southeast district in cooperation with Mr. D. C. Moor- ing, Extension Division Horticulturist, have conducted demonstrations in planting, pruning, spraying, and cultivating 551 orchards which represented a total of 45,779 fruit trees.

## PURE BRED LIVESTOCK

The county agents of the Southeast district were directly or indirectly responsible for the purchasing of the following pure bred livestock: 17 stallions, 5 jacks, 13 mares, 42 bulls, 217 cows, 428 boars, and 787 sows.

## DISEASES OF LIVESTOCK

The county agents of the Southeast district are alert for the first symptoms of disease in livestock as may be judged from the following list of animals which they treated or assisted in treating: 22,480 cattle for blackleg and anthrax, and 12,348 hogs for cholera.



## FARM IMPROVEMENTS

Our county agents realize that better homes, farm buildings and well kept lawns are an incentive to better citizenship, and that they are ever on the alert to advise and assist in this great line of work is substantiated by the following improvements made at their suggestions: 57 new buildings erected, and 102 remodeled; 23 water systems installed, 219 lighting systems installed; 201 home grounds improved and 188 permanent pastures established, containing a total of about 3,183 acres.

## FAIRS

All of the counties in the Southeast district, with the exception of Bryan, Atoka, and Pushmataha, held Free County Fairs. The total appropriations made by county commissioners for their respective counties amount to \$35,450.00. The Free County Fairs are becoming more popular each year, as is evidenced by the increased appropriations for this great educational work which is a strong incentive for better agriculture, horticulture and livestock.

## BOYS CLUB WORK

The agents of this district, under the supervision and with the cooperation of State Club Leader E. B. Shotwell, enrolled a total of 4,630 club members in the various club activities. Our records show that 926 of the above club members made exhibits at the Township, County and State Fairs, where they "pulled down" a total of \$4,633.20 in premiums.

The honors of first place on individual corn and cotton club exhibits as well as those of first honors on the county team of corn and cotton were won by club members in the Southeast district.

## LIVESTOCK CLUBS

These clubs are very popular with the boys, especially the pig and calf clubs, as is evidenced by a membership of 773 boys in the pig club and 51 in the calf club. The first annual boys pig club show and sale was held at Durant, at which there were 196 pure bred pigs, averaging 200 pounds, on exhibit. One hundred and ninety of these pigs were Durocs, and attracted much attention, as well as much favorable comment.

In the performance of his official duties, District Agent Milstead made 99 visits to county agents, held 56 meetings, with an attendance of 6,774, and traveled a total of 18,891 miles; spent 182 days in the field and 105 days in the office.

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## SOUTH CENTRAL DISTRICT

(Comprising Fifteen Counties)

C. W. CALLARMAN, DISTRICT AGENT

The beginning of the year found the farmers of this section enjoying unusual prosperity as a result of the better than average crops of the past year and the exceptionally satisfactory prices obtained.

This condition stimulated an unusual interest in farming and practically every available acre of farm land was planted. The demand for farm land had a tendency to raise rents. The general prosperity was also responsible for a liberal outlay for improved farm implements as well as encouraging the farmer to pay the prevailing high prices for labor. Many farmers took advantage of the liberal credits extended to them to purchase better livestock, making only partial payments at the time of purchase.

All these things, coupled with the prevailing high prices, so developed a scale of living that entirely neutralized the benefit that might have come from the good crops and good prices of 1919.

The crops grown in this section in 1920 were record crops with the exception

of cotton in the extreme southern counties where boll-weevil and boll-worm damaged it severely. In limited areas the destruction by these pests was almost complete. Outside of the areas affected by the boll-worm and weevil, the crops in general were never better, neither were crops better cultivated. The season was ideal and the spirit of optimism was everywhere present and the best crops ever grown in the State were produced at a tremendous cost.

When the marketing time came, prices were rapidly declining. Day by day the prices of all farm crops went down, while the price paid for labor in harvesting remained high. As a result, the abundant crops were marketed at a loss. Many, many times when cotton was sold, it did not bring enough to pay rent, ginning, and picking. Optimism began to give way to discouragement and as prices continued to decline, discouragement gave place to despair.

Many tenant farmers are giving up their equipment and are moving to town to seek employment at day labor.

There has been a county agent working in each of the counties in the South Central district throughout the year with the exception of Murray county. This is a small mountainous county with a very low valuation and they decided they were unable to meet the expense, and so discontinued the work July 1.

There is an evidence of general settling down on the part of the county agents. They are not leaving the work and changing about as they were a year ago and altogether the work of the county agent is of a more constructive and stable nature than ever before.

During the year more pure bred livestock has been brought into the district than ever before in this length of time. The most of this has been placed through the club work but a good many adults have been interested in buying better breeding stock and approximately 300 pure bred bulls have been placed in the fifteen counties during the year as well as a large number of registered boars.

Mr. Waters, county agent in Love county, has organized what is perhaps the first Pure Bred Bull Association in the State, using three pure bred Holstein bulls.

Certainly at no previous time has so much pure seed been used by the farmers. This is a direct result of the agitation by the county agent for the planting of good seed. In two instances the county agent has built up such a demand for good seed that a farm has been set apart to be devoted entirely to the production of better seed and the county agent has left our service to take active charge of the seed production of these farms.

Considerable time has been given by the county agent to terracing, as a large portion of the farm lands of this section are rolling and great waste of soil from erosion is constantly going on.

Crop rotation as a means of building up and maintaining soil fertility has been advocated but as yet with little result as most of our farmers are unconvinced that the present system of continuous cropping will finally result in the depletion of fertility, as our soil is new and strong.

At the present time the farmers are making an insistent demand for help in marketing crops and in view of the fact that cribs and elevators are full, that great quantities of cotton are on the yards and prices far below the cost of production, their demand does not seem unreasonable. Therefore, the agents in the cotton counties are giving considerable time to assisting the organizers of the Oklahoma Cotton Growers' Association in the work of organizing a cooperative cotton selling association. The agents' part is largely to interest some of the leading farmers in the county and organize them into a county "Farm Bureau" and starting them on the job of organizing the Cotton Growers' Association. This work is being carried on very successfully in three counties at the present time, about 2,000 members having been signed up since work started about November 10.

Through the activities of the county agent, twelve of the fifteen counties held county fairs under the auspices of the County Free Fair Law.

This gives the general public a fine opportunity to observe the work of the agent and many times the boys and girls club work is the most attractive and interesting feature of the fair. ~~In~~ **no way can the value of the county agent's work be**

more definitely estimated than by comparing the quality and quantity of the agricultural exhibits from year to year in the community and county fairs.

There has developed during the year quite an interest in various forms of organizations among farmers. In some localities the Grange is the leading organization, in others the Farmers' Union, and in two counties, the Farm Bureau. Many livestock associations have been organized during the year and are doing fine work in most instances.

Several communities have organized truck growers' associations and have put in community potato curing houses.

Most counties have a county poultry association, affiliated with the State association and each county so organized holds an annual poultry show. As a result of this work, poultry products have become one of the State's most dependable assets.

Since July 1, 1920, the following fifteen counties comprize the South Central district: Logan, Oklahoma, Kingfisher, Canadian, Grady, Cleveland, Murray, Johnston, McClain, Garvin, Marshall, Love, Carter, Jefferson, Stephens. At that time Seminole, Pontotoc, and Pottawatomie were taken from this district and added to the Southeast district, and Kingfisher, Logan, Grady, Stephens, and Jefferson counties were added.

#### CLUB WORK

The club work as it has been carried on has yielded valuable results. About five hundred boys have come into possession of a pure bred, registered sow on an easy payment plan. Ninety-five percent of these boys have met their obligation in a very satisfactory manner, and as a result, there are now, counting the increase, about 2,500 good hogs in the hands of club boys in the district.

There is also a considerable number in cow and calf clubs, but this work is too new to venture an opinion on, as yet, but is looking good at this time. There are about 200 boys in the baby beef club now feeding in the contest that will close at the Southwest American Fat Stock Show in March at Oklahoma City.

There are also about 300 pigs being fed by club boys in the pig fattening club. Altogether the club work is going nicely and is watched by everybody with considerable interest but especially by business men and bankers.

In reviewing the work done in the district during the year, I am pleased to say that, while the year has had the usual disappointments, and perhaps we have not gone as far towards our ideals as we hoped, and the great unfinished tasks make the little we have accomplished look small and unimportant, yet we know that some burdens have been lightened, some discouragement has given way to hope and in some hearts have been conceived a desire for better things.

As long as the weary mother toils from morning until night in the cotton patch and children are kept from school to drag a cotton sack up and down the cotton row; as long as a large percent of our farmers are farming the other man's land and live in huts unfit for the housing of animals; as long as the country roads are a bog-mire in wet weather; as long as the country school is as inefficient as it now is; as long as farm life is as unprofitable and unattractive as it now is, our work is unfinished.

With the splendid force of county agents now on the job, and the fine spirit of those in the State Department supervising them, and the able cooperation of the Washington office, we hope for great things in the coming years.

During the year beginning December 1, 1919, and ending December 1, 1920, in the performance of his official duties, the district agent for the South Central district made 117 visits to county agents, attended 14 demonstrations, attended 84 meetings with an estimated attendance of 6,920, traveled 16,941 miles; spent 193 days in the field and 88 days in the office; wrote 191 personal letters and 163 circular letters.

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#### BOYS CLUB WORK

##### PROJECT No. 4

There were at the close of the fiscal year ending June 30, 1920, five persons employed under this project, including one stenographer and one clerk.

The work is supported entirely by State, Federal and College funds (see financial statement for this report).

Boys club work probably suffered more than any other line of Extension work by the readjustment made necessary following the close of the war; however, the enrollment fell off but slightly during the past year.

During the year there were four resignations in the club force, and only two new appointments made, which reduced the club force to three persons. Resignations were caused in every instance by better paying positions being offered.

The change in county agents in many of the counties during the year and the falling off of some of the counties in continuing county agent work has had its marked influence in the progress of the work. However in spite of all these obstacles the work has made good progress during the year and has brought forth good results and at this time has a very bright outlook for the future. Club work with boys and girls in Oklahoma is now considered one of the most important works of the county agent. The State as a whole looks upon it as one of the most vital and far reaching efforts that is being put forth by the agent. Each county and home demonstration agent is required to give club work a due share of time.

The boys club leader and his assistants are club specialists whose duty it is to assist the county agent in enrolling, organizing and carrying on the work, to prepare and send out club instructions and to have charge of and direct all State club activities, such as State Fair Schools, judging contests, etc.

The total enrollment in all white boys clubs for the year 1920 was 19,643, divided as follows: Corn, 4,065; cotton, 1,810; peanuts, 934; grain sorghum, 1,853; wheat, 574; Irish potatoes, 676; sweet potatoes, 176; pig fattening, 875; pig breeding, 3,352; calf fattening, 226; calf breeding, 348; dairy calf, 159; sheep, 298; bee, 132; fruit, 664; crop rotation, 60; poultry, 3441.

In addition thereto, there were enrolled 4,006 negro children who did club work along the same lines as the white children.

The club work has grown past the stage where each club member can be visited personally by an extension representative. It has become necessary to organize the members into local clubs with a president, a secretary, and other officers. An adult in the neighborhood, usually the teacher, is chosen to supervise the club. During the year 1920 there were 507 separate club organizations, to each of which a charter was issued. Twenty-seven counties had no chartered clubs. The others are as follows: Carter, 23; Cleveland, 2; Garvin, 13; Jefferson, 6; Johnston, 1; Logan, 9; Creek, 7; Garfield, 11; Grant, 4; Harper, 4; Kay, 26; Lincoln, 43; Major, 3; Noble, 6; Okfuskee, 26; Payne, 14; Woods, 6; Woodward, 11; Coal, 4; Haskell, 15; Hughes, 4; Latimer, 13; McCurtain, 37; McIntosh, 11; Pittsburg, 11; Pottawatomie, 13; Seminole, 10; Beckham, 1; Blaine, 9; Comanche, 5; Cotton, 1; Ellis, 4; Greer, 7; Jackson, 1; Kiowa, 3; Roger Mills, 1; Washita, 4; Adair, 20; Craig, 7; Mayes, 2; Muskogee, 10; Ottawa, 5; Okmulgee, 21; Rogers, 12; Wagoner, 6. Reports from club officers and supervisors indicate that splendid work was done through the local club organizations. Some of the local clubs held as many as nine meetings during the season.

Club members were given instructions by means of correspondence, circulars, bulletins, The Extension News, by the supervisors, by teachers, by county and home demonstration agents, and the club agents. Rallies and short courses were held where instructions were given in seed bed preparation, seed selection, grain and cotton judging, poultry raising, stock raising and feeding, the care and handling of tools, etc. In this connection there were held 40 short courses, attendance 2,655, and 50 rallies with an attendance of 5,227. There were 105 other meetings with an attendance of 13,072. In addition, there were held two State-wide short courses or fair schools, one at each of the two State fairs. There were 246 boys in attendance at the short course or fair school at Oklahoma City, and about 60 in attendance at the Muskogee Free State Fair.

The State Fair Schools are supported by appropriations from the State legislature, \$5,000.00 being available each year for the two fiscal years. The first prize winner in each club activity in each county was entitled to attend the State Fair at Oklahoma City, and the second prize winner in each club activity in each county

was entitled to attend the Muskogee Free Fair at Muskogee. During the attendance at the Fair Schools, club members were given practical instruction in seed and grain selection and grain judging, as well as in caring for and judging livestock. At the close of each school, contests were given in livestock and grain judging. From the results of these contests, one livestock judging team consisting of three members was selected to go to Atlanta, Georgia, and another team consisting of seven members was selected to go to the International Fat Stock Show at Chicago. In addition to the instruction given at these free fair schools, club members attending each school were conducted over the fair grounds and permitted to examine all the exhibits at the fairs. They were also allowed the privilege of observing the races one day at each place, and also the entertainment in the evening.

The Oklahoma City Fair Association has a large dormitory building especially for the boys, and the Muskogee Fair Association has completed a two-story club building, arranged for exhibits below, and dormitory and class rooms above.

At the State Fair at Oklahoma City there were offered as premiums for boys club work \$2,163.00 regular, and \$1,886.00 special premiums. At the Muskogee Free State Fair there were offered as premiums for boys club work \$2,033.00 regular, and \$1,548.00 special premiums. For the best work done in each of the five banking districts of the State there were awarded five scholarships at the A. and M. College by the Bankers' Association, valued at \$1,000.00. Also one each was awarded by the Cottonseed Crushers' Association, the Cooperative Livestock Development Association, and Grain Dealers' Association, valued at \$160. each. Liberal premiums were awarded for club work at township and county fairs, amounting to, as reported from 57 counties, at township fairs, \$10,930.00, and at county fairs \$24,290.25, as well as the State fairs. Reports were received from 57 counties on township and county fairs from which we learn that 2,039 boys made exhibits at township fairs and 4,786 boys made exhibits at county fairs.

2,262 boys made exhibits at the two State fairs, making a total of 9,087 boy exhibitors at State, county and township fairs. This does not include premiums won by boys in poultry club work. In addition, there were 238 exhibits by negro club boys at State fairs.

Total cash prizes won by the boys at both township and county fairs amounted to \$35,220.25. The total amount available from all sources, including State fairs, for boys club premiums for the year 1920 was \$44,330.25.

The club work has had the hearty support of the State superintendent of education and a majority of the teachers and county superintendents of the State. The Club Department has been given an opportunity to discuss club work at most of the teachers' meetings in the State during the year.

In the discharge of their duties during the year 1920, the club leader and his assistants traveled a total of 40,226 miles by rail, 6,640 miles by auto, attended 256 meetings with an attendance of 21,285, made 271 visits to agents, visited 58 demonstrations, wrote 3,530 personal letters, 103 circular letters to 12,275 people, sent 45,712 club letters, 33,991 bulletins, and 22,893 record books.

## HOME DEMONSTRATION WORK

### PROJECT No. 5

During the year 1920 the Home Demonstration force was composed of the following: Forty-two Home Demonstration Agents, employed for twelve months at an average salary of \$150. per month; one assistant who had direct supervision of all home demonstration work; two District Agents and two Assistant District Agents to supervise the work of the Home Demonstration Agents; an assistant who had supervision of Home Demonstration Clubs and all nutrition work. The poultry work was supervised by two poultry club specialists. The Extension Horticulturist supervised all horticultural and garden work and the Extension Dairy Specialist assisted with all dairy work.

In the discharge of their duties, the Home Demonstration supervising force worked a total of 1,967 days, visited 105 demonstrations, attended 640 meetings with a

total attendance of 45,002; traveled by rail 84,970 miles and by auto 5,920 miles; made 280 visits to agents.

An annual meeting of Home Demonstration Agents was held for ten days at Stillwater in August, 1920. Three days of this meeting was for new Home Demonstration Agents, and preceded the annual Farm Congress, August 22 to 28. There were thirty-seven Home Demonstration Agents in attendance at this meeting and their average expense for the entire meeting including railroad fare and subsistence, was \$32.57 each.

Seven two-day group meetings for Home Demonstration Agents were held during the year. General topics such as exhibits, fairs, sewing and canning were discussed.

#### HOME DEMONSTRATION CLUBS

Home Demonstration Clubs in Oklahoma are organized for the purpose of studying home making and advancing community interest and community life. Thinking women everywhere realize that they should have greater scientific knowledge of feeding and clothing the family, prevention and cure of diseases, child welfare work, home building, saving of time, strength, and money, as well as the needs of the community and how to meet them. To assist in accomplishing this end, programs of work covering four years are offered. 2,000 members were enrolled in these clubs for the year 1920. The interest in this work is increasing greatly. The growth in home demonstration club work has been gradual and steady.

Probably the most effective and satisfactory demonstration work done among women and girls this year is the use of the pressure cooker. 683 pressure cookers were bought by women throughout the State. 10,213 cans of meat alone, show the use of the pressure cooker in food preservation, not to mention the thousands of jars of vegetables.

This year culling was made a problem, and proved one capable of solution. Agents in ten counties were each asked to cull five flocks. People were interested in these demonstrations and results were worth the effort as shown by the following two sets of figures taken as representative data:

1	Hens in flock .....	443
	Hens culled .....	188
	Eggs gathered week before culling .....	1,054
	Eggs gathered week after culling .....	870
2	Hens in flock .....	105
	Hens culled .....	40
	Eggs gathered week before culling .....	276
	Eggs gathered week after culling .....	269

#### HOME DEMONSTRATION FAIR EXHIBITS

Home demonstration exhibits were made at the two State Fairs at Oklahoma City and Muskogee. In these exhibits the following thirteen phases of the work were shown, namely: garden work, poultry work, orchard work, labor saving devices, food conservation, health, clothing, bee keeping, home demonstration clubs, nutrition, home management, beautifying the home grounds, and home decoration and furnishing. This exhibit occupied a space nine feet wide by thirty feet long.

#### BOYS' AND GIRLS' CAMPS, RALLIES, ETC.

Boys and girls club camps, short courses, and rallies played very important parts in the home demonstration work for 1920. These meetings were held for giving special instruction and for recreational purposes. In six counties during July and August groups of club members met at suitable places for camping out. The young people attending these camps were divided into classes of about ten members each with a leader in charge of each class for the purpose of instructions and routine duties. The most successful of these camps was held near Ardmore. A site in the Arbuckle Mountains for a summer camp for boys and girls clubs of Oklahoma was deeded to them by the Turner Falls Company. Club houses will be built for them on their site for the summer camp of 1921.

There were sixteen club rallies and short courses held this year in different counties. The subjects selected for instruction at these short courses and rallies were those that would most nearly meet their needs at that time.

#### GIRLS CLUB WORK

During the past year over 11,000 girls enrolled in club work of different kinds. Approximately 6,000 of these were canning club girls. 1,535 of them reported the growing of the one-twentieth acre garden. Their average cost of production per twentieth acre was \$6.75. The average cost of canning per twentieth acre was \$2.71.

While all of these girls did not send in reports it is known that the greater number enrolled did much canning.

Over 4,000 girls belonging to poultry clubs, reported 46,272 chickens raised. The total value of all poultry products reported by women and girls was \$99,073.00.

Besides canning and raising poultry, the girls did the required cooking and sewing in their respective clubs. Their exhibits at the county and State fairs were greater than in any previous year.

#### EXHIBITS

Last year there were thirteen canning team exhibits at the State Fairs. This year there were seventeen. A "team" exhibit consists of exhibits from ten girls.

In all, there were 1,928 individual jars exhibited. Last year's total was 1,723 jars. Added to this were 403 jars from the negro girls. These exhibits showed a marked improvement in canning and in the quality of the products canned. Many individual exhibits were worthy of special mention.

The sewing exhibit was the largest the club girls of Oklahoma have ever sent to the State Fairs.

The club exhibit in the State capitol at Oklahoma City was made larger. To the 187 jars already there, twenty more were added.

The Bankers' Association awarded four scholarships, valued at \$200.00 each, as prizes in girls club work. The four girls are in attendance now at A. and M. College. 219 club girls are paying all or part of their expenses while in school from money earned in club work.

### HOME DEMONSTRATION WORK—EASTERN DISTRICT

#### ANNA LEE DIEHL, DISTRICT AGENT

In looking back over the year 1920 and thinking of the bright prospects we started out with, I just wonder if we have fulfilled all of them. I can see where we gained in some places and lost in others. Some lines of work we pushed and some were lost sight of in the hurry to get certain plans carried out while the weather was favorable, for it has been a year of much rain and variable weather.

The first discouragement came in the early spring and was caused by a hard frost that effectively killed the fruit and left us to depend on vegetables for our canned exhibit at the fairs. This was hard on the east side, for it is here that most of the Oklahoma fruit is grown. This calamity was a fine thing for the demonstration canning and brought out as nothing else has ever done, the work that has been accomplished by the home demonstration agents in teaching the women and girls to can vegetables.

The State Fair exhibit was largely composed of canned vegetables.

We are going to make special mention of some features that were carried out in individual counties, that we think will spread to other counties and will be of great help, not only to the demonstration work but to all people.

In Marshall county in 1919 one enterprising woman bought a good canner. During the spring of 1920 the new style can sealer was brought to the attention of the home demonstration agent and she immediately called this woman's attention to it. She bought one and started to can corn. Being a neighborly woman, she called several families together and they canned in community style. 2,000 cans were put up in this one community, the men helping and taking great interest in

doing the sealing. One man claimed a record of five perfect seals per minute. Finally another sealer was ordered and in all, according to the home demonstration agent, 2,700 cans were filled. Three families together had 500 No. 2 cans of corn in a county and community where the canning of vegetables had not been thought of, and next year we expect this work to grow until the home demonstration agent will need helpers to demonstrate the sealer work.

The school fairs of Pontotoc county have been carried on for the past two years and have been very successful in training the children of that county what and how to exhibit at their county and State fairs. No prizes are given, but the products are examined and discussed as to their fitness for exhibition.

The important features of the demonstration work during the year have been steam pressure canning and cooking, sewing, poultry, and regular club work.

The steam pressure canner makes it possible to save all the vegetables that are hard to can and also enables the housewife to can her fresh meat for spring use, as usually the butchering is all done at one time and there is such a quantity of fresh meat that it cannot be used at one time. Some agents report as many as thirty and forty steam pressure demonstrations.

The interest taken in the sewing work has been very gratifying to the demonstration leaders. Formerly it was the custom to buy cheap ready-made garments, but now the girls are interested in cutting, fitting and sewing, and the mothers catch the enthusiasm and want to know many things. At the Farm Congress a demonstration was given in making dress forms. Several agents have introduced these into their counties and have met a ready response from the women. A new club has been formed for the girls, "The Sewing Club", and already many girls are joining it.

Poultry work is steadily gaining ground on the east side of the State. At first it was hard work to get the children to join this club, but now it is a very popular club and two counties on the southern border are planning very extensive poultry work for 1921. Through the children's poultry club the parents have become interested and the agent is instructed to buy more and better breeding stock and pure bred eggs for setting purposes.

The club work on the eastern side of the State has been very active during the year. Rallies or short courses were held in all the counties, and good exhibits were shown at the fairs. In one county, LeFlore, the first county fair was held and this has greatly stimulated the interest in club work, because the club winners were sent to the State fair. The club reports have been harder to get because of the rainy weather and the cotton crop.

Rogers county leads in women's rural clubs and in other counties one club has been organized and held through the year; while in some counties the demonstration agent has been able to interest the mothers by having her club girls plan meetings and parties for them to attend and then giving a program or some other form of entertainment for them. McCurtain county the past year has made this one feature of their club work. Twenty-one counties during the past year have taken part in the home demonstration work, and in every one of these counties we find there has been some good lasting work accomplished.

The negro demonstration work has been carried on in the counties of Okfuskee, Okmulgee, Wagoner, Muskogee, and McIntosh, and has been successful both in number of families reached and in kinds and quantity of work done. The negro home demonstration agents are untiring in their efforts to raise their people to a better and more sensible manner of living and their exhibits at the State fair showed hard, thorough work.

We are still impressed with the great need of home demonstration work on the eastern side of the State and we hope during 1921 to help the people to get more and better poultry, to make it one of the commercial features of the State, to encourage the dairy industry by teaching the women the great need of milk as a food, and of the value of a good dairy herd, to insist that they save their food surplus by canning and drying, that they learn to make and care for their clothes and how to improve and beautify their homes and to own their own homes.



## WESTERN DISTRICT

MRS. DAISY FRAZIER, DISTRICT AGENT

Home demonstration agents are in the following seventeen counties: Caddo, Canadian, Carter, Comanche, Custer, Garfield, Garvin, Grady, Greer, Harper, Logan, Major, Noble, Oklahoma, Pottawatomie, Tillman, and Woodward, distributed through the districts, supervised by Mr. Callarman, Mr. Markland, Mr. Diehl, and Mr. Milstead.

After the regular boys and girls club work there were three outstanding features to the work in the Western district: the use of the pressure cooker, club camps, and the work of home demonstration clubs.

There are 155 regularly organized boys and girls clubs with a total attendance of 29,454 during the club year. Regular lessons were given each month on poultry, canning, cooking, and sewing. Canning teams gave successful demonstrations at county fairs and county teachers' meetings.

Perhaps the work next to club work, in importance, is the use of the pressure cooker, as a time and fuel saver and a help in food preservation. 402 cookers have been placed in homes in the Western district this year.

The canning of meat has been one of the big features, as farmers could kill a small beef and can the meat to use during harvest. The canning of chickens, not only saved feed but allowed the family to have fried chicken the year around.

Club camps have come to stay. Carter, Logan, Comanche, and Garfield counties held very successful camps. All club members having club work up to date were entitled to attend.

The Governor, State Treasurer, and President of Board of Agriculture visited the boys and girls at Turner Falls Camp, Carter county. This is to be made a permanent camp ground for all club members and their families.

The home demonstration clubs are following a four years' program sent out from this office. Many of them sent delegates to the Farm Congress held at the College the last week of August.

There are 65 regularly organized home demonstration clubs with an attendance of 5,078 during the past year.

Greer county has seven communities organized, that meet regularly once each month, with a program suitable for all.

Some special poultry culling work has been done at the regular meeting of the home demonstration clubs.

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EXTENSION SPECIALISTS

The work of four Extension Specialists is planned with the idea of working only with and through the county and home demonstration agents in the respective counties. In fact, no work is planned by extension specialists in counties that do not have either a county agent or a home demonstration agent. However, calls for help on special problems from counties not having a county or home demonstration agent are attended to by the proper specialist, but no definite work is planned except in cooperation with a county or home demonstration agent. Each extension specialist is required to prepare and submit a definite program of work for the entire year and no plans are approved that do not contemplate close cooperation with the county agent or home demonstration agent.

## RURAL SANITATION

## PROJECT No. 6

The object of this project is to give instruction and conduct demonstrations in rural sanitation, healthful arrangements of farm homes and country school houses, prevention of diseases, eradication of harmful insects, etc.

This project has been carried on in Oklahoma by the Extension Division since

January 1, 1915. Dr. Dixie B. Tucker, a practical physician, familiar with rural conditions, was employed as leader of this project.

The results obtained have been very satisfactory, and greatly appreciated by the country people. This work is greatly needed, as sanitary conditions in the country as a rule are not so good as in the cities and larger towns. As a result of this work in several counties in the State, all the rural schools have fixed the wells to prevent surface water draining into them, and have made their toilets fly-proof. Also many other improvements along sanitary lines follow the active campaigns carried on by the leader in this project.

The leader of this project reports that women's clubs are assisting in getting legislation for physical examination of school children. During the State Fair at Oklahoma City and the Free State Fair at Muskogee, a physical examination was put on for the prize winning club girls. For three hours each day, three internal medicine men, three eye, ear, nose, and throat men, and three dentists conducted this examination. These were the best doctors to be had in the State.

A chart was given to each girl; one sent to the home demonstration agent, and one kept in the office. The defects were shown on a chart signed by the doctor who made the examination. One hundred eighty-five girls were examined. Five were found with no defects. Teeth and throat predominated as the defective parts of the body. These girls have since made efforts to have the defects remedied.

Visits are made to the county and home demonstration agents and a week is spent in each county showing moving pictures on correct sanitation and hygiene and giving lectures on transmission of infectious diseases.

Seven counties have sanitized every rural school in the county. Some of these counties have two hundred fifty and some three hundred schools. Ten or fifteen counties have fifty percent of schools sanitized according to specifications. That is, the floors have been oiled, well of drinking water concreted and toilets made sanitary. In many school districts the homes have been sanitized like the school.

Thousands of children are using tooth brushes who never owned one before. Two moving picture reels are used, showing the importance of care of teeth, and the diseases derived from diseased teeth. These also show the importance of nutrition of the body to make good teeth.

The specialist in this work, in the discharge of her duties, in the last year has spent two hundred days in field work, thirty-nine days in the office, written one hundred twelve letters, sent out twenty circular letters, and eighteen bulletins, addressed one hundred forty-four public meetings with an attendance of 19,596; traveled by rail 10,828 miles and 1,639 miles by other conveyance.

## EXTENSION WORK FOR NEGRO MEN AND BOYS

### PROJECT No. 7

This project is carried on in cooperation with the State Colored Agricultural and Normal University at Langston, Oklahoma. The board of regents for the Langston University allotted \$600. on the salaries of colored agents for the last fiscal year. The president of the university cooperated financially and otherwise in every way possible in aid of the negro county agent work. On account of the limited State appropriations for the Langston University it was necessary to support the negro work chiefly from Smith-Lever funds. There were eight negro county agents and one district agent during the past year. Demonstration work with negroes was carried on under negro agents in Muskogee, Okmulgee, Wagoner, Creek, Lincoln, McIntosh, McCurtain, Okfuskee, Seminole and Logan counties. Late in the summer work also begun in Kingfisher county.

An agents' meeting for negro agents was held at Langston where instruction was given by the district agents and specialists from the A. and M. College at Stillwater, and also by members of the faculty at Langston. The negro agents also attended the Farm Congress at Stillwater in August, 1920. Their average expense for railroad fare and subsistence while attending the Farm Congress was \$23.42, each.

During the summer six weeks normal school for colored teachers was held at Langston, where daily lectures on the various phases of extension work were given

by Extension Division speakers from Stillwater. This work was very effective in gaining the support of the colored teachers of the State, more especially for boys and girls club work.

The following is a partial report of the work accomplished by the colored men agents:

They assisted in the organization of 15 colored farmers' clubs with a membership of 606. There is in their respective counties a total of 38 colored farmers' clubs with a total membership of 1,666. 22 of these organizations buy and sell cooperatively. They report having bought cooperatively 15 head of hogs, 1,000 bushels of cotton seed and two cars of corn and having sold cooperatively 100 bales of cotton.

There were 127 corn demonstrators, 49 of whom made full reports. The average yield of the corn demonstrations was 54 bushels per acre, which was 22 bushels more than the yield under ordinary methods. 61 farmers tested their seed corn for germination and 161 farmers have selected their seed corn for next year's crop.

There were 30 kafir demonstrators, 20 of whom made reports. The yield on demonstration plats was 34 bushels per acre which was ten bushels above ordinary methods. Eight farmers tested their seed before planting and nine have selected seed for next year's crop.

There were 13 milo demonstrators making an average yield of 40 bushels per acre, which was 15 bushels per acre above ordinary methods. Five tested their seed before planting and nine have selected their seed for next year's crop.

There were three feterita demonstrators reporting a yield of 50 bushels per acre.

There were 88 cotton demonstrators, 40 of whom made full reports. The average yield on these demonstrations was 1,414 pounds of seed cotton per acre, which was 606 pounds over ordinary methods. 98 negro farmers have been induced to select their seed for next year's crop.

There were two negro tomato demonstrators reporting a yield of 207 bushels per acre.

There were four wheat demonstrators, reporting a yield of 27 bushels per acre, which was seven bushels over ordinary methods.

There were eight oat demonstrators, seven of whom reported an average yield of 45 bushels per acre, which was 15 bushels per acre over ordinary methods.

There were 27 hay crop demonstrations in all. Eight of them were alfalfa demonstrations; five cowpeas; ten sorghum and rye; and four mixed. Nineteen of these hay demonstrations were reported upon.

There were eight peanut demonstrators, seven of whom made reports. The yield was 40 bushels of nuts and 1 1-4 tons of hay per acre.

There were ten Irish potato demonstrators, seven of whom reported. They reported an average yield of 74 bushels per acre, which was nineteen bushels above average yields for ordinary methods.

There were 27 sweet potato demonstrators, seventeen of whom reported. The average yield was 155 bushels per acre, which was 60 bushels per acre above that under ordinary methods.

There were 59 home orchard demonstrations, with a total of 1,280 trees. Thirty-six orchards were pruned, eleven orchards sprayed and eleven new orchards planted through the influence of the colored agents.

Through the influence of the colored agents, four stallions, five jacks, and eight brood mares were brought in. There were also brought into the counties five pure dairy bulls and 24 pure bred dairy cows and heifers and 41 pure bred beef cattle. These agents also assisted in having brought in 37 pure bred boars, and 113 pure bred sows for colored farmers.

These agents report 30 adult poultry demonstrations. The poultry management on 89 farms has been improved as a result of their work.

These agents have induced colored farmers to treat for various diseases and pests: 79 cattle, 6,104 hogs, and 6 horses. 441 of these were personally treated by the colored agents.

Seventy-five farmers were advised in the proper use of commercial fertilizers and 201 were induced to take better care of barnyard manure. Nine water systems and one lighting system were installed through the agents' influence; also the sani-

tary conditions of forty-eight farm were improved; ninety homes screened against flies and mosquitoes; and forty-five sanitary privies were erected. Fifteen colored farmers terraced their land; eighteen new pastures were established; 363 acres were drained and stumps were removed from 80 acres of land. Eleven road improving demonstrations were held.

In the discharge of their official duties the colored agents made 7,592 visits to cooperators, club members, and others; traveled a total of 32,246 miles; addressed 546 meetings with an approximate attendance of 24,943. These agents spent about 31% of their time at office work and 69% at field work. They report 1,628 visits to schools and assisted eight schools in outlining agricultural courses. They assisted in four extension schools with an attendance of 995. Forty-three boys were attending schools or colleges as a result of club work.

There were seven negro fairs at which 789 demonstrators or club members exhibited work and 350 of them won prizes.

## HOME DEMONSTRATION WORK FOR NEGRO WOMEN AND GIRLS

### PROJECT No. 8

The negro home demonstration work was carried on in the following counties: Muskogee, Wagoner, Okfuskee, Seminole, Okmulgee, McIntosh, and Lincoln during the year 1920. The work was handled by four negro home demonstration agents under the supervision of the white district agents. From early spring enrolling time until the last report was in, these four colored women agents were kept busy meeting the demands of their people for help.

The club enrollment was large and started off early in the spring with lively, enthusiastic club rallies attended by parents and teachers as well as children. The children furnished a good part of the programs, telling of their different club activities. This was good exercise for them, teaching them to talk to large crowds.

This year has been an ideal one for crops, so their gardens and field crops have given them good returns and the agents report quantities of canned goods stored for future use and many canning demonstrations given.

In all there were 77 organized girls' and women's clubs with 1164 members enrolled. Of this number, 956 cultivated garden plots. The return from these gardens was nearly 22,000 pounds of fresh vegetables. 7,156 jars of vegetables and fruits were canned.

Twenty-three club girls are paying all or part of their school expenses from money earned in club work.

The girls are especially interested in the sewing work and the love for making a pretty towel or luncheon set kept girls at club work who might have given it up early in the season.

The poultry and egg work has grown wonderfully and in compliance with the Jackson Poultry Law, some good school house poultry and egg shows were held. The one at Boley, where 54 dozens of eggs were exhibited, was judged by the poultry specialist from the College and was pronounced the best egg show in the State.

The 260 girls enrolled as club members reported the raising of 1,600 chickens. Poultry products produced by both women and girls reached a total value of \$2,185.

Other lines of work, other than canning, sewing, and poultry work, on which much work has been done, were dairy work, sanitation and health, child care, cookery, home industry and thrift, the use of household conveniences, and beautifying the home.

## POULTRY CLUB WORK

### PROJECT No. 9

While the club enrollment and number of reports received is somewhat less than last year, it is due to the fact that in 1919 there were forty-seven home demonstration agents and in many counties an assistant county agent. In 1920 there were only

thirty-eight women agents, some on part time, and no assistant county agents after July 1.

However, we feel that more effective work has been done, as the reports show that about the same number of standard bred poultry is being kept, more and better poultry houses have been built, and larger and better exhibits made at the fairs and poultry shows.

At the Oklahoma State Fair there were 556 exhibits; at the Free Fair held at Muskogee there were 600 exhibits, and at the State Poultry Show held at Muskogee there were 310 birds shown.

According to reports from county agents, the result of the club work on the farms shows that there is that ever increasing demand for standard bred poultry.

Judging work and culling were stressed particularly this year as it teaches the children to know their birds, which helps them to use better judgment in mating their breeders and in disposing of their surplus stock.

There were 73 counties in the State organized for poultry club work. There were 5,222 girls and 3,471 boys enrolled. Of these 1,173 girls and 558 boys made reports. There were mailed out 30,126 bulletins, 14,104 record books and 57 packages of posters. 773 compositions on poultry subjects were submitted by club members. 87,727 eggs were set and 56,127 chicks hatched. Of these 40,148 were raised. 403 exhibits or poultry shows were held.

The following is the financial statement of boys and girls poultry clubs in Oklahoma for 1920:

CREDIT	
Fowls sold, 10,447 .....	\$15,670.50
Eggs sold, 142,629 .....	4,774.23
Fowls on hand November 1, 39,701 .....	59,551.50
Houses and coops built (206 houses; 554 coops) .....	3,796.37
Prizes won .....	1,925.80
<b>Total</b> .....	<b>\$85,718.40</b>
DEBIT	
Poultry houses and coops built .....	\$ 3,796.37
Eggs for hatching .....	7,525.98
Breeding stock .....	2,388.30
Feed bought .....	34,641.18
<b>Total</b> .....	<b>\$48,351.83</b>
Total receipts .....	\$85,718.40
Total cost .....	48,351.83
<b>Profit</b> .....	<b>\$37,366.57</b>

### COUNTY AND STATE SHOWS

At the State and county fairs there were exhibited 6,781 fowls, 560 dozens of eggs, and a total of 3,670 prizes won. 1,651 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 six hundred school house shows were held under the State Poultry Law.

As near as can be determined, about 8,000 persons have made exhibits at these fairs and shows and a total of not less than \$22,000.00 has been paid in premiums to these exhibitors.

### SCHOOL HOUSE POULTRY SHOWS

Total number school house poultry shows held in the State .....	403
Total number of school districts represented in the school house shows .....	399
Total number of birds exhibited at school house shows .....	5,813
Total number of children exhibiting birds .....	3,254

Total amount of money awarded as premiums .....	\$5,271.61
Total number of children exhibiting eggs .....	700
Total number dozen eggs exhibited .....	1,946
Total number of adults attending shows .....	6,275
Total number of children attending shows .....	27,894

Mr. Chas. M. Smith, specialist in charge of this project, reports that in the discharge of his duties he has traveled 18,556 miles; that he has visited 222 club members' homes and other farm homes; that he has written 1,246 letters; issued fifteen circular letters of 17,478 copies; sent out twelve club instructions of 74,066 copies; written twelve articles for publication; attended nineteen club meetings with a total attendance of 1,151; attended twenty-four other meetings with an attendance of 2,440; delivered 107 lectures, with an attendance of 9,048; gave ninety-eight demonstrations with an attendance of 3,951 and conducted seven short courses.

P. H. HAYES, ASSISTANT POULTRY CLUB AGENT

(From December 1, 1919, to April 23, 1920)

Mr. P. H. Hayes was assistant in poultry club work until April 23, 1920. In the discharge of his duties, Mr. Hayes reports having visited forty counties and the homes of 97 club members and others; wrote 76 letters, attended 30 club meetings with a total attendance of 1,666; attended 17 other meetings with a total attendance of 582; delivered 95 lectures with an attendance of 4,228; gave 80 demonstrations with an attendance of 1,732; and traveled a total of 7,259 miles.

E. O. EDSON, ASSISTANT POULTRY CLUB AGENT

Mr. E. O. Edson began work as assistant extension poultry specialist on June 5, 1920, and between that time and December 1, 1920, visited 24 counties and the homes of 66 club members and others; wrote 83 letters; attended 18 club meetings which were attended by 773 club members and others; delivered 42 lectures with a total attendance of 2,008; gave 20 demonstrations with an attendance of 553; conducted 6 short courses; and traveled a total of 12,375 miles.

## POULTRY DEMONSTRATIONS

### WOMEN POULTRY DEMONSTRATORS

There were enrolled 655 women for adult poultry demonstration work. Of these 262 purchased standard bred eggs and 172 standard bred stock. They raised 55,635 chickens. They sold 68,996 pounds of poultry at \$22,078.72. They eliminated 3,418 males for infertile egg production. They preserved in waterglass 2,418 dozens of eggs; built 108 poultry houses; and organized 30 cooperative breeding associations.

### REPORT OF BOYS' AND GIRLS' POULTRY JUDGING CONTEST

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 ever conducted to date. While the number represented in this contest was not so great by just a few, yet in many respects it surpasses former contests.

There was a total of eleven 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, \$60.00; second, \$54.00; third, \$48.00; fourth, \$42.00; fifth, \$36.00; sixth, \$30.00; seventh to twelfth, (inclusive) \$21.00 each; thirteenth to twenty-fifth, (inclusive) \$15.00 each; and twenty-sixth to thirtieth, (inclusive) \$12.00 each.

The counties competing and their respective winnings follow with their team score out of a possible 300 points:

PRIZE	COUNTY	POINTS	AWARDS
1st	Muskogee	300	\$60.00
2nd	Pittsburg	284	54.00
3d	Payne	208	48.00
4th	Pontotoc	200	42.00
5th	Mayer	184	36.00
6th	Wagoner	178	30.00
7th	Okmulgee	168	21.00
8th	Grady	160	21.00
9th	Tulsa	154	21.00
10th	Latimer	148	21.00
10th	Rogers	148	21.00

From the above it is very noticeable that some of these children are learning the art of poultry judging.

The three girls from Muskogee county and two from Pittsburg county made perfect scores placing each of the fifteen birds in their correct order.

### COLORED POULTRY CLUB WORK

There were 800 negro boys and girls enrolled in poultry club work. They set 2,348 eggs and raised 1,245 chickens. They sold 128 fowls and 696 dozens of eggs. They have on hand 882 fowls. They won \$28.50 in prizes; 43 poultry houses were built. There were 91 members reporting.

This record is not included in the record of white club members, and is very incomplete on account of difficulty in securing reports.

### DAIRY EXTENSION WORK

#### PROJECT NO. 12

This project was carried on in cooperation with the dairy division of the United States Department of Agriculture until July 1, 1920. On account of lack of funds the dairy division was forced to withdraw their cooperation on that date, since which time the entire expense of the project has been borne by the Extension Division. The object of this work is to secure the adoption of better methods of dairying, and to assist in every way possible the development of the dairy industry in the State. Two specialists are employed, one for the entire State and one for the tick-freed area. Mr. C. W. Radway is the leader of this project, and Mr. H. J. Childress, assistant for the tick-freed area. The salaries and expenses of these two specialists were paid jointly by the United States dairy division and the Extension Division until July 1, 1920. The chief lines of work carried on were silo and dairy barn construction, herd records, cow-testing associations, junior dairy club work, creamery organization, purchase of improved dairy stock, lectures, demonstrations, exhibits at fairs, etc. All work was carried on in close cooperation with the county and home demonstration agents.

The following annual report was submitted by Mr. Radway, the leader of this project:

Dairy farming in Oklahoma might be divided into two classes; first, the farmer who keeps from five to ten cows of no definite breeding and sells cream to the centralizer; and second, the farmer living near a large town or city and selling market milk. Fully seventy-five percent of the first class, or cream-selling dairymen, have just common cows, or what they call dual purpose cows. This is true, particularly in the western part of the State where the farmer lets the cow take three or four months vacation while the wheat harvest is on. However, a few are turning their attention to the dairy herds.

The dairymen living near the cities are doing very well. They have, for the most part, a dairy breed, either registered or high grade. There seems to be a greater appreciation of record work and good bulls in these dairies than in the wheat or cotton districts. Cow testing clubs and herd records show that the dual purpose

and mixed herds average 160 pounds of butter fat per cow per year. This average is a little high as only the best herds of this kind were interested in the record work.

The Tulsa County Cow Testing Association, composed mainly of dairy herds, shows an average butter fat production per cow of 222.4 pounds per year. Forty-four native cows and half breeds averaged 196.4 pounds of butter fat per year, while forty-seven Holsteins, grade and registered, averaged 254.0 pounds of butter fat.

The growth of the dairy industry for the past year has been along the line of quality rather than the increase in numbers. There is no data indicating an appreciable increase in dairy cattle in Oklahoma. Several Oklahoma dairymen, during the past year, have replaced their poorest cows by good ones with official records and secured the services of a good bull with a production record.

If the dairy industry is to reach its maximum efficiency in Oklahoma, the great majority of dairymen must make improvement along four definite lines.

*First*, they should secure cows of producing ability for foundation. In many cases, they could sell the poorest one-third of their herd and buy one or two extra good cows.

*Second*, they should secure the services of a good bull whose dam has a production record of, at least, 500 pounds of butter fat. If they cannot buy such a bull individually, they may do so through a bull association.

*Third*, they should have some definite feeding system, suitable to a dairy cow instead of the "letting her rough it" system as at present.

*Fourth*, the great majority of dairymen need equipment to make the dairy work more congenial as well as more sanitary.

Nearly every county in the State has one or more dairies well equipped and doing well. These places exert a very good influence on other dairymen in the way of improvement.

In all cases when working with dairymen or in attempting to put on any dairy extension of any nature, the county agent was consulted and full plans made known to him. In practically all cases, the county agent has given valuable advice and assistance and his attitude has meant the success of the dairy extension projects. In all cases there is the heartiest cooperation and most cordial feeling between the county agent and dairy extension office. In fact, it seems that *cooperation* is the key to whatever success we have obtained.

Dairy extension work has been carried on through the following associations, clubs and individuals: Oklahoma State Dairy Association; Oklahoma Jersey Cattle Club; Oklahoma Holstein Breeders' Association; Tulsa County Cow Testing Association; Central Oklahoma Cow Testing Association; Marietta Cooperative Bull Association; Junior Dairy Club; County Dairy Association; Individual Demonstrators (production records and feeding); Bankers and Commercial Clubs.

*Problem I.—Foundation Stock for Oklahoma Dairymen.*—In many cases the Oklahoma dairyman has considered registration papers on dairy cows sufficient and have paid too little attention to production records. This attitude is gradually being changed and, at present, many are keeping private records and experimenting with feed rations and getting ready for regular official work. In many cases the records show that registration does not always guarantee production in dairy cattle. These people are beginning to realize the need of some real foundation stock.

Wherever there is sufficient demand, the dairy extension office has agreed to assist in purchasing cattle from the best herds in the north. From past experience it is absolutely necessary to do the buying of northern cattle direct from the northern farmer and not trust the professional dealer. Communities desiring foundation stock for dairy should select their purchasing committee and then get information from the extension office as to the best places to purchase.

The assistance given Mr. Lloyd Adair seemed the most interesting of any. Mr. Adair is only 19 years of age and for the past two years has been a member of the junior dairy club. He became so interested and did so well with his heifer that when he decided he wanted a Jersey herd the local banker loaned him \$1,700.00 on



his own signature to purchase the foundation herd. One of the heifers purchased was the first prize winner in the junior yearling class at Oklahoma State Fair in 1919.

*Problem II—Better Bulls for Oklahoma.*—Progress in dairying does not end with the purchase of high producing cows. That step in dairying is only temporary. For permanent progress in dairying, bulls of good individuality and from high producing dams must be secured to head the herds. Several of the Oklahoma dairymen have purchased splendid bulls but many feel that they cannot spend the money required to purchase a bull with a 500 pound butter fat record in his pedigree. However, the cooperative bull association solves this problem of expense.

One bull association has been organized in Oklahoma, it being in Love county.

*Problem III.—Feeding Cows for Profit.*—One of the biggest problems of dairying in Oklahoma is the profitable feeding of dairy cows. On hundreds of farms the dairy cow is left to shift for herself, even in the winter time. There is no definite feeding system and, even worse still, there is little attempt on many farms to make the farm feed the cow. Every farmer having ten or more dairy cows should have a silo. Herd records made in Oklahoma have shown that silage fed herds will produce from 25% to 30% more milk on silage than on dry feed alone.

Also the farmer can profitably use winter pasture, plan for his hay and a portion of his grain feed. Through our many meetings this plan has been explained. Also, it forms the greater part of our work in the cow testing associations and testing clubs.

Twenty-two dairymen with 183 cows kept herd records during the past season.

*Problem IV.—Labor Problem.*—The greatest single factor today in limiting the growth of the dairy industry in Oklahoma is the problem of labor. Several dairymen have limited their herds to what they can care for themselves.

Many of the one-crop farmers hesitate to do any dairy work because they dislike the regular daily routine for 365 days in the year.

Many of those already doing some dairy work would find it profitable to secure some of the labor-saving devices.

The milking machine is past the experimental stage and would be a profitable investment on many farms. Also a water system, a convenient milk house, dairy barns and silos are needed.

In attempting to develop interest in silos several personal letters have been sent to prospects telling them of results of feeding silage to dairy cows in Oklahoma. The same method was employed relative to all other phases of dairy improvement. Many people were reached through State, county and local meetings.

Addresses were made by the dairy specialist at fifty-one meetings attended by a total of 5,206 people.

The Tulsa County Cow Testing Association was organized June 1, 1919, with 388 cows at \$2.00 per cow. This did not furnish sufficient money for the proper work of the association but the dairymen saw the value of cow testing and so the necessary arrangements were made, and the association was reorganized this year with 530 cows at \$3.00 per cow. The first year the dairymen hesitated in raising \$800.00 for cow testing work but this year they readily gave \$1,600 for an association.

Thirty-three cows have been sold as unprofitable producers during the year. The average butter fat production of all cows completing a year's work is 224.4 pounds of butter fat per cow per year.

The second regular cow testing association was put in operation on November 11, 1920. This is called the Central Oklahoma Cow Testing Association. It has 22 dairies with a total of 410 cows and extends from El Reno to Norman and as far north as Edmond. No data has been recorded from this association to date.

#### JUNIOR DAIRY CLUB

During the past year 191 boys and girls were enrolled in the junior dairy club. Only 3 counties had 10 or more members, they being Canadian with 14, Oklahoma

with 12, and Kiowa with 10. In these counties the members were so scattered that it was almost impossible to do any intensive work with them.

To do the best work in junior dairy work, members should be in groups of 10 or more so they could meet at a central point to discuss dairy problems and have butter fat tests made.

From past experience we find the best results where the junior dairy club member started with a heifer that would freshen soon.

It seems better to have a plan for intensive work with the boys and girls, calling on those who are in groups and reaching some by personal letter.

#### OKLAHOMA JERSEY CATTLE CLUB

During the State Fair at Oklahoma City in October, 1920, the Jersey breeders organized a State-wide Jersey Cattle Club. It is the object of this club to foster the Jersey breed. It is also understood that scrub Jerseys are not to be handled by dealers in Oklahoma. In this matter the club intends to protect the dairymen of the State.

The dairy specialist of the Extension office was chosen as secretary-treasurer of the club.

#### MILK SHOW—FREE STATE FAIR, MUSKOGEE, OKLAHOMA

Through the splendid cooperation of the Home Demonstration office, the Free State Fair and the Department at Washington, a splendid milk show was put on at Muskogee. The milk show was in charge of Miss Madge Reece of Washington, D. C., assisted by Miss McPheeters of the Extension office of the Oklahoma A. and M. College.

Also in addition to this milk show there was collected the largest exhibit of dairy products ever shown in Oklahoma, there being 152 exhibits of milk and milk products. All these exhibits were scored and full score and explanations mailed to the exhibitors.

#### DAIRY WORK IN TICK FREED AREA

Dairy work for the tick freed area was carried on in cooperation with the Dairy Division of the U. S. Department of Agriculture, Mr. H. J. Childress, dairy specialist, in charge.

Mr. Childress reports that in his territory better bulls are being used, more permanent fixtures are being provided, and better methods of handling the products are being employed; especially is this true in the vicinity of large cities.

*Silos.*—No silos were built in tick freed area since July, 1919. Difficulty in obtaining labor was largely responsible for this. Many dairymen let their silos stand empty on account of having no help to fill them. Records show that dairymen having silage produced milk cheaper than those who did not. One dairyman who fed silage in the ration produced milk for twenty-eight cents per gallon while another who did not have silage had a cost of 36.7 cents per gallon.

The funds appropriated by congress for this work for the fiscal year of 1920-21 being greatly reduced, it was necessary to discontinue the special dairy work in tick freed area in Oklahoma. Mr. Childress resigned April 15, 1920, to accept county agent work in another state.

In the discharge of his duty between July 1, 1919, and April 15, 1920, Mr. Childress traveled a total of 8,312 miles by rail and 300 miles by other conveyance; visited 197 farms, attended 19 meetings, addressed 1622 people, wrote 525 official letters, spent 105 days in the office and 106 days in field work.

### FARM ENGINEERING

#### PROJECT No. 16

The last general report prepared on this project included the work up to December 1, 1919, therefore, this summary will date from that time until June 1, 1920.

## TERRACING

Much of the terracing that should have been done last fall had to wait until this spring, as the weather and roads would not permit the work in season. There were so many calls for terracing in the late winter and spring that many of them had to be put off until it was too late to get the best results. The farm engineering specialist attempted to serve the new agents first, so as to give them something worth while to do, while they were getting acquainted with their work and the people.

Since the last report there have been twenty-eight terracing demonstrations which were attended by two hundred sixty-three farmers. In most cases these demonstrations were really for the benefit of the county agent.

Terracing work has hardly been started in the State. Terraced fields are few and far between. If there is a part of the State that needs terracing most, it is the central part, including parts of Logan, Oklahoma, Lincoln, Pottawatomie, Seminole, and Pontotoc counties. The work is well started in some of these counties.

## DRAINAGE

The increasing value of land has caused many farmers to become interested in reclaiming their waste spots, and has resulted in several calls for assistance with drainage work. This work is usually a matter of giving advice rather than a demonstration at the time. In this connection there were several calls for plans for water gates to prevent the water from creeks that have been dammed off of the adjacent fields from backing onto these fields.

## IRRIGATION

Practically no irrigation work has been done during the past six months except to discourage a few farmers who were thinking of putting in systems, when it was evident that their work would be unprofitable. In company with the county agent these farmers were visited and their situations talked over and they were shown why their proposition would prove unprofitable.

## FARM BUILDINGS

There has been quite a steady demand for plans for farm buildings. Twenty-five plans have been sent out, not including those for poultry houses, which are now furnished in bulletin form.

The problem of buildings for the free fairs and livestock sales has been called to our attention frequently. Blue prints of buildings which seem to answer the purpose very well have been prepared. Several such buildings will likely be erected this summer.

In the discharge of his duties during the past six months the leader of this project has traveled 5,914 miles by rail and 1,393 miles by auto, written 123 letters, visited 34 county agents, visited 59 farms, and assisted with 33 demonstrations at which there were present 275 people.

The leader of the Farm Engineering Project resigned June 1, 1920, to accept a similar position in a neighboring state at an increase in salary. Up to this time a new leader for this project has not been employed.

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## HOG CHOLERA CONTROL WORK

### PROJECT No. 17

The hog cholera control work is carried on in cooperation with the Bureau of Animal Industry of the United States Department of Agriculture. Dr. C. L. Nelson, whose salary and travel expense were paid by the U. S. Bureau of Animal Industry, had charge of the work from this office. On the 31st of May Dr. Nelson resigned to accept a position with the Oklahoma Livestock Development Association. This discontinuance of this work was made necessary by the failure of congress to provide the necessary funds for the support of the work.

Most of the county agents had been taught by Dr. Nelson the latest control

methods for hog cholera and they with the help of local and State veterinarians are able to take care of the hog cholera control work fairly well. There has been during the year no very serious outbreaks of hog cholera. Most of the county agents have learned to vaccinate hogs for cholera, and in their pig club and hog demonstration work, all hogs and pigs are made immune. This disease is rapidly being brought under control and it is not dreaded now as before modern methods of control were generally known. The great drawback in hog cholera control work in this State is the fact that in many parts of the State hogs are permitted to run at large.

Dr. Nelson reports that between July 1, 1919, and May 31, 1920, work was carried on in 49 counties, 156 addresses were made at meetings at which there was an attendance of 7007 people. \* 54 demonstrations in the preventative treatment were made which were attended by 810 persons. There were 527 farm visits made, 1049 farmers and hog raisers were personally interviewed, 350 persons were taught to administer properly the serum preventive treatment; of these 49 were county agents, 40 were veterinarians and 271 were hog raisers. In the discharge of his duties Dr. Nelson traveled by rail 11,036 miles and by other conveyance 3,869 miles.

## HORTICULTURE

### PROJECT No. 18

This project was begun in Oklahoma in July, 1918, and a specialist in horticulture was appointed. His work is carried on in close cooperation with the county and home demonstration agents. Interest in horticultural work seems to be growing especially in the eastern part of the State.

The principal home problems in this State from a horticultural standpoint are better gardens, better home orchards and beautifying home grounds. The first two problems only, have been attacked during 1920. Under farm problems, some time has been devoted to better seed potatoes, both sweet and Irish, and commercial fruit growing.

### HOME GARDENS

Through the county and home demonstration agents, better gardens, which include fall plowing, early and properly arranged plantings of staple vegetables and fall gardening were encouraged.

Meetings were held in Haskell, Rogers, Latimer, Pittsburg, and Logan counties to encourage fall plowing of gardens.

An increased effort has been made to increase the number of women demonstrators in the raising of frost proof cabbage. Cabbage seed has been sent to the home demonstration agents in Garvin, Carter, Coal, Comanche, Creek, Grady, LeFlore, McCurtain, Love, Noble, Okmulgee, Pittsburg, Okfuskee, Pushmataha, Seminole, Tillman, Wagoner, Logan, and Greer counties.

The selection and arrangement and care of other vegetables have been discussed at general club meetings.

Fifty-six asparagus plantings were made by club members who won the plants as prizes in their canning club work.

In order to encourage fall gardening, meetings were held in Rogers, Muskogee, Pittsburg, Latimer, Pontotoc, Logan, Haskell, LeFlore, Oklahoma, McClain, Seminole, McCurtain, and Pushmataha counties.

### HOME ORCHARDS

The scarcity and high prices of trees seem to have caused people to appreciate more the value of the trees they already have.

The demand for pruning demonstrations last spring was greater than could be handled,

As the freeze killed practically all the fruit, the interest in spraying was at a low ebb.

Through the fruit clubs, we have attempted to encourage better care of the home orchards. The fruit club activities were extended. Under the new plans a child of club age can become a member of a fruit club if he has either of the following bear-

ing plants: 2 apple trees; 2 pear trees; 2 peach trees; 2 plum trees; 2 cherry trees; 2 apricot trees; 2 grape vines; 1-40 acre strawberries; 1-20 acre blackberries; 1-20 acre dewberries. The enrollment in the fruit clubs this year is 664 as compared with 62 for last year.

The increased planting of home orchards has been pushed with fair success. During the year 59 blackberry and 96 dewberry plantings have been made by club members who won the plants as prizes on their canning club work. These plants were donated by Oklahoma nurserymen.

### COMMERCIAL FRUIT GROWING

Commercial fruit growing has been encouraged in Adair, McCurtain, and Ottawa counties. In Adair county, apples and strawberries have been the principal fruits planted and these are still being planted. In Ottawa and McCurtain counties strawberries are being planted.

### POTATO WORK

The potato club work this year has been very good. The enrollment for this year is as follows: for white children, Irish potato club 670, sweet potato club 176; for colored children, Irish potato club 52, sweet potato club 70.

There was an increase in number of exhibits at the Staté fairs this fall and the exhibits scored higher, thus showing an increase in quality.

### IRISH POTATO DEMONSTRATION

Conducted by Extension horticulturist in cooperation with County Agent E. A. Kissick of Okfuskee county, State of Oklahoma, farm of E. P. Garrison, Okemah, Oklahoma, in the spring of 1920.

The Early Ohio seed potatoes were furnished by the Clay County Cooperative Certified Seed Potato Growers' Association of Moorhead, Minnesota, through their manager, P. E. Clement.

### SUMMARY

Yield: The total yield from the Minnesota Early Ohio seed per acre, no fertilizer, sprayed, was 91 1-2 bushels; unsprayed potato yield, 94 bushels. The yield for Triumph seed (home grown), no fertilizer, sprayed, was 57 1-2 bushels; no fertilizer, unsprayed, same yield.

The yield from the Minnesota Early Ohio seed per acre where fertilized with 1000 pounds of 15% acid phosphate, sprayed, was 154 bushels; unsprayed, 173 bushels. The yield for Triumph seed (home grown), fertilized with 1000 pounds of 15% acid phosphate, sprayed, was 116 bushels; unsprayed, 167 1-2 bushels.

The acre yield from the Minnesota Early Ohio seed per acre where fertilized with 700 pounds of cotton seed meal, sprayed, was 106 1-2 bushels; unsprayed, 140 1-2 bushels. The yield for Triumph seed (home grown), fertilized with 700 pounds cotton seed meal, sprayed, 80 2-3 bushels; unsprayed, 95 bushels.

### CONCLUSIONS

The results of two applications of 4-4-50 Bordeaux Mixture on Irish potatoes on May 12 and 26 in Okfuskee county were negative. The spraying as reported by County Agent E. A. Kissick seemed to check the growth of plants temporarily, but there was a less amount of blight on the sprayed potatoes than on the unsprayed potatoes.

The yield of the Minnesota Early Ohio seed was invariably greater than that from the home raised Triumph seed.

### HORTICULTURAL SOCIETY

The interest in the State Horticultural Society continues to increase. During the past summer a two days' program was held instead of one as in previous years. There was good attendance at all the meetings and the interest was good.

## PUBLICATIONS

During the year articles were furnished for newspapers on orchard and garden work, club instructions for Irish potato, sweet potato, fruit, and canning clubs. Since the last annual report three circulars have been published for general distribution.

In the discharge of his duties, the leader of this project made 151 addresses with an attendance of 9,285; 88 demonstrations were held with an attendance of 1,199. There were 278 consultations; 496 official letters written; 12,827 miles by rail and 3,668 miles by auto were traveled.

## COTTON CLASSING WORK

## PROJECT No. 20

Early in the spring of 1920 cooperative arrangements were made with the Bureau of Markets, U. S. Department of Agriculture, to carry on in Oklahoma during the next fiscal year, work in cooperative cotton classing. The object of the work was to teach cotton growers better marketing methods in cotton by means of practical demonstrations at various points throughout the State. The work is considered temporary and it is not expected to continue longer than is necessary to demonstrate the value of the proper grading, classing and marketing of cotton, and also organizing to do this work cooperatively.

It was agreed that the Bureau of Markets and the Extension Division should jointly employ a specialist to have general charge of the work and six cotton classers, at a cost of not to exceed \$500 each, the remainder of their salaries to be paid by the people who received the service.

Mr. C. F. Mitchell was employed as the specialist to have charge of the work, beginning April 1, 1920. A survey of the cotton territory in Oklahoma was made and the points selected at which the classers should be located. The competition between towns for these classers was so great that a number of towns agreed to finance the whole work, provided the specialist would supervise the work the same as at points where financial cooperation was given.

The six points where financial cooperation was given and where classers were located were Anadarko, Altus, Chandler, Idabel, Mangum, and Shawnee. The other points where classers were located, the local people agreeing to pay for the entire cost of same, were Marysville, McAlester, Holdenville, Hobart, Lexington, Noble. The salaries of these classers were from \$2,500 to \$3,000 per year. Most of the classers were employed and began work July 1, 1920.

The State Board of Agriculture and the State Market Commission gave this work active support. Mr. J. A. Whitehurst, the president of the board, furnished an office and stenographic help at the Capitol building in Oklahoma City for the specialist in charge of the work.

Organizations of cotton growers were formed at each point where a classer was located for the purpose of supporting the classer and selling their cotton cooperatively. It was arranged by these associations that a fee of 50 cents per bale should be charged for the expense of the work at that point.

The preparation for this work during the first three months beginning April 1, consisted mainly in educational work with regard to the proper handling, grading, and marketing of cotton.

Hearty cooperation was given the work by the county agents, the State press and the entire legitimate cotton trade of Oklahoma. The opposition met is chiefly local, coming from persons who are interested in buying the farmers' cotton at the lowest possible price, regardless of its value. A survey was made by one of the leading farm papers of the State and it was found that cotton of a like grade and staple was selling at an average of \$6.50 per bale higher in the markets where classers were stationed.

On account of the unfortunate market situation farmers failed to patronize the classers as they should at most points, and the work will probably not be self-supporting.

## RODENT PESTS

## PROJECT No. 21

The campaign for the control of rodent pests began in the fall of 1918 and was continued through 1920.

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 first at Lawton, Oklahoma, and later in the year at El Reno, Oklahoma.

The 1919 session of the Oklahoma legislature passed an act declaring prairie dogs to be a public nuisance, and making it the duty of landowners to exterminate them. The act provided that the county commissioners in counties infested with prairie dogs should purchase and keep on hand in the county clerk's office a prepared prairie dog poison to be sold to residents of the respective counties, at cost. The law further provided that such poison be one that was recommended by the Experiment Station at Stillwater. With law as a basis, cooperative relations were entered into with the various counties through their county agents. The part of the Biological Survey in such cooperation being to prepare an efficient poison for prairie dogs from material furnished by the counties and to instruct the county agent or the county clerk in preparing such poison; to see that such poison was put up in suitable containers, being properly labeled and with complete instructions for its use on each container.

The law above referred to created an organization for carrying on this work, and therefore it was unnecessary to do preliminary organization work. It was only necessary to acquaint the counties with our willingness to assist them, and the cooperative relations were established. The same formula being used for destroying gophers as is used for prairie dogs, this same method was used in getting gopher poison to the farmers, in mixing poison and giving instructions in the mixing of it. Thirty-five meetings were held with a total attendance of sixty-nine. It was not recommended that farmers mix their poison at home because of the greater possibility of accidents. One farmer in preparing his own poison with instruction sent him from the College at Stillwater, killed three cattle. In rat campaigns five meetings were held with a total attendance of ninety-five.

In developing this work it was not necessary to solicit counties to undertake it. It was only necessary to bring to the attention of the county agents and county officials that the Biological Survey cooperating with the A. and M. College was willing to help them in carrying out the provisions of the law under which the work was conducted and they were anxious to cooperate with us. Only two counties carried on this work without cooperating with us.

No local organizations were established nor were any already established used in conducting rat campaigns. In these the Boy Scouts, Rural Schools, and some local business men's organizations were used. The business men's organizations were used for financing and the others referred to for actually doing, and demonstrating, thereby, the work of exterminating these pests.

A survey was made in thirty-four counties in the western part of the State to determine the amount of land on which there were prairie dogs and it was found that there was a total of approximately 391,600 acres infested. Of this, 5,000 acres in Comanche county and 1000 acres in Kiowa county were Government lands. A total of 80,543 acres were treated during the year and a total of 7,465 acres which had been previously treated were treated again. 3,000 acres of this retreated land was Government land in Comanche county and 1,000 was Government land in Kiowa county. This leaves 2,000 acres of Government land in Comanche county and 9,440 acres in other counties yet to be retreated. There are still 305,247 acres of prairie dog infested lands in the State not treated.

Taking the reports received from farmers as a basis for an estimate there were 26,207 acres of crops protected during the growing season. These crops include corn, kafir, milo, wheat, oats, alfalfa, and cotton, but do not include pasture lands. It is estimated that the saving by cleaning up the prairie dogs for the year was \$113,780.00. 1,386 individual cooperators used this poison. The average percent of

rodents killed was 89.6. The total expenditure by cooperators for this work was \$4,800.00. the amount of poisoned grain was 21,643 quarts, or over ten tons.

In addition to the prairie dog work carried on in the State, poison was mixed and sold in Logan county for pocket gophers only. Forty farmers purchased ninety-six quarts of poisoned grain for pocket gopher control, all of whom so far as heard from are well pleased with their success. Some of the poison mixed for prairie dogs and pocket gophers was used in the northwest part of the State on kangaroo rats with excellent results. A rat control campaign was carried on in Garfield county but the data on it is not yet available. One man reports that he found it highly effective on house mice.

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## OUTLOOK

Notwithstanding the disturbances and disappointments that have come to our farmers and all others dependent on agriculture on account of unusual business conditions the world over, there are many reasons why we should look into the New Year with bright hopes for the future.

1st. Our fertile soil, but a little more than a third of a century removed from the virgin prairies or primeval forests, is responding bountifully to better tillage.

2nd. Our people, both rural and urban, possess wonderful fortitude, industry, and optimism and come from the most progressive states in the Union.

3rd. By reason of better rural organization work our problems of production as well as distribution and marketing are being gradually worked out along definite fundamental lines: (a) Preparation, (b) Investigation, (c) Approach, (d) Demonstration, (e) Closing. These are the essential steps in successful farm business.

By better *preparation* through reading and study our farmers are becoming apt along lines of more economic production of our staple crops.

Our producers are beginning to give more attention to investigating the needs and demands of the various markets which they hope to supply.

In approaching the consuming public our farmers are realizing more and more the value of publicity and honest advertising.

Our demonstration work in agriculture and home economics is proving the great value of standardization and community growing of staples because the world learns to rely upon such a community for a constant supply of quality products.

Closing the sale of a commodity that a community, county, or the State can produce economically is fast becoming the climax in the annual program of our people; in other words, "getting the money."

Our conviction is that the county agent system of extension work, together with the substantial assistance of the State Market Commission, will be able to work out the question of distribution along with the problems of production to the point where producers will be successful and satisfied and the consumers will receive the necessities of life in such abundance and quality that the burden of the high cost of living may be permanently reduced.

In the discharge of my duties as Director during the past year, I have traveled 29,233 miles by rail, 1,248 by auto, making a total of 30,517 miles traveled; made 340 visits to agents; and attended 215 meetings with an attendance of 23,154.

Respectfully submitted,

JAS. A. WILSON,  
Director.