

FARMERS COOPERATIVE DEMONSTRATION WORK OF VIRGINIA.

T. O. Sandy, Burkeville, Va.  
(State Agent)

1908?

No. 1-- Principal crops that have been Demonstrated this year:

Ans -- Corn, oats, crimson clover, peas, grass vegetables and dairying.

Corn-- Our aim is to increase quantity and improve quality. Virginia has, through the Demonstration Work, just realized the importance of corn breeding. 50 per cent of our farmers last fall plowed and sub-soiled for corn. Breaking 8 inches and sub-soiling from 7 to 8 inches.

Improved seed corn has been used this year. Nine tenths of our farmers will field select their seed this fall. There is great enthusiasm among our demonstrators on this important point. No seed corn was furnished by the department except a small quantity furnished the school boys.

METHOD OF CULTIVATION OF CORN CROP.

The land is broken in the fall 8 inches and sub-soiled from 7 to 8 inches. Total depth broken 15 inches. 1 ton of lime is applied, broadcast, to each acre and worked immediately into the soil with a cut-a-way harrow. After the frost is out of the ground, in the spring, the cut-a-way harrow is again used, going over the land both ways and often enough to get a deep, fine, perfect seed bed. When the ground is warm enough apply, broadcast, 500 pounds of pure raw bone, to the acre. The corn is then planted, the distance apart depending entirely upon the natural fertility of the land to be planted. Just when the corn begins to peep above ground a weeder is run

over the land, repeating every 3 or 4 days until the corn is 6 inches high. A two horse cultivator is then run, every 8 or 10 days, certainly after each rain, to keep the land soft and mellow. This is done as long as the team can go through without damage to the corn. Then a one horse, fine tooth cultivator, should be used until the silk and tassel period.

Below is an estimate and cost of production of corn by the above method.

Cost of Production of 10 acres of corn 1908

Plowing 10 acres, 8 inches deep-----	\$ 15.00
Subsoiling-----	\$ 15.00
Harrowing 4 times. (Cutaway harrow)-----	\$ 22.00
Planting-----	\$ 2.50
Fertilizer, 2 1/2 tons of bone meal-----	\$ 67.00
Use of weeder-----	\$ 5.00
Cultivating (4times) 5 days with 2 horse cultivator	\$ 12.00
Cutting and shocking. (Harvester)-----	\$ 10.00
Husking and storing-----	\$ 20.00
Total Cost-----	\$ 491.00

RECEIPTS

700 bushels corn at 80 cts. per bushel-----	\$ 560.00
20 tons of corn stover at \$5.00 per ton-----	\$ 100.00
Total-----	\$ 660.00
Net profit-----	\$ 491.00

Remonstrator---T. G. Sandy,  
Burkeville, Nottoway Co. Va.

Report of Progress. (Continued)

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Test made by Local Agent, W. C. Rosser,  
Rustburg, Campbell Co., Va  
( Demonstration Method)

Cost of plowing and sub-soiling 1 acre of land.....	\$ 5.00
Preparation of land.....	\$ 3.00
Seed and seeding.....	\$ 1.50
Cultivating and gathering.....	\$ 4.00
Total cost.....	\$ 13.50

RECEIPTS.

50 bushels of corn at 80 cts. per bushel.....	\$ 40.00
Cost of production.....	\$ 13.50
Net profit.....	\$ 26.50

Note-- Rough feed not included.

(old method, 1 acre of land)

Cost of plowing.....	\$ 2.50
Preparation of land.....	0 00
Seed and seeding.....	\$ 1.50
Cultivation.....	\$ 3.00
Total cost.....	\$ 7.00

RECEIPTS

20 bushels of corn at 80 cts. per bushel.....	\$ 16.00
Cost of production.....	\$ 7.00
Net Profit.....	\$ 9.00

Note-- Rough feed not included.

As a proof of the increase by using demonstration methods I give the figures below.

1909

C. H. Agee, (Demonstrator) Dillwyn, va.-- 94 1/2 bushels per acre.

J. T. Oliver, (Demonstrator), Allens Level, va. 81 3/8 bu. per acre.

G. T. Elam, (Demonstrator) Dillwyn, va. 73 bushels per acre.

By old methods none of these men made over 40 bushels per acre.

Our Agent, Mr. J. T. Oliver, Allens Level, Va. reports Mr. C. H. Agee, Dillwyn, va. has cut his corn, (1909) and expects the yield to reach 100 bushels to the acre. C. B. Davison, Allens Level, va. thinks he will get 80 bushels to the acre and Walter Davison, Allens Level, va. 75 bushels per acre.

Data on the corn crop (as illustrated in photographs No. 1 No. 2 No. 3 Demonstrator---J. D. Eggleston, Jr. (Superintendent of Public Instruction) Worsams, Va. Prince Edward Co.

No. 4. Corn photograph, is the growing crop of T. O. Sandy, Burkeville, Hottoway Co. va. September 15th 1909 (Demonstration method) The best judges in this community estimate the yield at 100 bushels per acre.

No. 5. Corn photograph, is the growing crop on an adjoining farm, September 15, 1909 (Old method) Will possibly make 10 bushels per acre.

The corn crop over eastern va., where ever demonstration methods have been followed, has doubled, and in some instances three times as much yield as by the old method. With the exceeding dry spell of weather we have had this season our demonstration corn has not suffered as has the other crops near by. Showing

conclusively that the storing of moisture into the soil, by deep plowing and frequent cultivation has proven that we can make corn under almost any conditions.

#### CRIMSON CLOVER.

We advocate the seeding of crimson clover. This I find is the finest improver of the soil of all of the grasses. It adds more nitrogen and plant food. Land that has grown a good crop of crimson clover has doubled its productivity and the soil is left an ideal seed bed for the following crop. It makes a fine pasturage for cattle, horses, sheep and hogs from April 1st to June 15th; they ~~will~~ take on more flesh, and cows ~~will~~ produce more milk than on any other grass. If harvested just as it is coming into bloom, makes an ideal hay. From reports that have come in, Demonstrators made from 1 to 2 1/2 tons per acre. This has been done all over our territory. As near as I can judge there was about 1500 acres seeded to crimson clover among our Demonstrators and Co-operators. I give below the amount of crimson clover seed sold by one Richmond seed house the past summer *30 thousand bushels*. This gives an idea of the enormous acreage seeded this year. The extensive introduction of crimson clover in Va. is due almost entirely to the Demonstration Work.

**ALPALPA**

We have been demonstrating with alfalfa to some extent. Some have failed to get a stand, especially when seeded alone. We have demonstrated by seeding it with other grasses. After harvesting the first hay crop the alfalfa takes possession of the field. It is a crop that requires a great amount of vegetable matter in the land on which it flourishes. We have been able to cut it 5 times in one season; averaging 1 ton per acre, at each cutting. This is the highest point that has been gained.

**MIXED GRASSES.**

The raising of good hay in Virginia had become almost a "lost art". Our lands are susceptible to the production of all of the grasses. We find a deep, pulverized seed bed, proper fertilization and the proper time to sow seed will bring results. I will give below figures from a few of our demonstrators, which will prove Virginia is not behind any section in the production of hay. It will only be a matter of a few years before our Virginia people will be exporting, rather than importing hay. From information from our demonstration Agents, and other sources, our hay crop for 1909 far exceeds any previous year. 2500 tons is a safe estimate of what was produced by following our method. In dollars and cents, at \$15.00 per ton, \$37000.00. For the season of 1910, judging from the amount of seed reported sold, the yield should be doubled.

## REPORT ON HAY.

PHOTOGRAPH NO. 1

Cost of plowing 8 inches deep, July, 1908 \$ 15.00

Harrowing with cut-a-way harrow 6 time, 6 days  
with 4 horses \$ 36.00

Fertilizer, 2 1/2 tons bone meal \$ 67.80

Seed, 25 quarts per acre- 2 parts timothy,  
2 parts herds grass and one part sapling clover,  
8 pounds alfalfa \$ 35.00

Seeding \$ 3.50

Harrowing and rolling, after seeding \$ 3.50

Cutting 10 acres, June 25, 1909 \$ 7.00

Hauling to the barn \$ 10.00

Total cost. \$ 177.80

## RECEIPTS.

50 tons of hay at \$ 15.00 per ton \$ 750.00

Cost deducted \$ 177.50

Net profit \$ 572.50

Demonstrator--T. O. Sandy,  
Burkeville, Va.

Hottoway Co.

HAY.

PHOTOGRAPH NO. 2

2nd. years cutting.-----Land

was treated just as Field No. 1, with the exception in January, February and March it was top-dressed (a manure spreader was used) with five tons of barn yard manure, to the acre.

Harvested from the 1st to the 6th of July, 1909

RESULT.

22050 pounds of green hay, to the acre.

88575 pounds of cured hay, to the acre.

4 tons and 141 pounds of cured hay, to the acre.

Demonstrator--T. O. Sandy,  
Burkeville, Wottoway Co. Va.

A FIELD OF RED CLOVER.

PHOTOGRAPH NO. 3

The land was plowed 8

inches and sub-soiled 8 inches in the fall of 1907. In the spring of 1908 it was thoroughly prepared and 500<sup>00</sup> pounds of pure raw bone was applied, broadcast, to the acre, and then planted to corn. At the last working of the corn 15 pounds of crimson clover and 10 pounds of red clover seed, mixed, was seeded on each acre. Between May 8th and 12th the crimson clover was harvested. The photograph is of the red clover, taken June 25th, which was harvested July 18th, 1909. Yield, 1 ton to the acre.

Demonstrator--T. O. Sandy,  
Burkeville, Va.  
Wottoway Co.

## HAY FIELD

## PHOTOGRAPH NO. 4

This 11 acres of land was worked down completely; incapable of production. The ground was broken July 1908, 6 inches deep. One ton and four hundred pounds of agricultural lime, to the acre, was then applied and thoroughly harrowed in. August the 10th to the 15th five hundred pounds of pure raw bone and 22 quarts of timothy, herds grass and sapling clover (9 quarts of timothy, 9 quarts of herds grass and 4 quarts of sapling clover) was seeded to the acre, April 1st. 1909, 250 pounds of pure dissolved raw bone and 100 pounds of nitrate of soda was thoroughly mixed and applied to each acre, as a top dresser. A small quantity of manure was applied to thin spots in the field.

Harvested, July 1st to the 15th, 1909

## RESULT

15 tons of cured hay to the acre

Demonstrator—Sr. D. Frisell,

Surfville, Va.

Hottelway Co.

## HAY FIELD.

Photograph No. 5

The land was

plowed 8 inches deep and sub-soiled 6 inches the first of August, 1908. 1 ton of lime was applied, broadcast, as soon as the land was plowed. It was thoroughly harrowed into the soil. The land was pulverized, a perfect seed bed was secured, deep and fine. August 15th 500 pounds of pure raw bone was applied, to the acre, and the following varieties and quantities of seed used to the acre.

10 quarts of timothy.

10 quarts of herds grass.

5 quarts of sapling clover.

A fine tooth harrow was then used to get the seed in. During February and March, 1909 this grass was lightly top-dressed with manure, a spreader was used.

Hay was harvested July 1st to the 5th.

## RESULT.

4 tons per acre.

Demonstrator---J. D. Bradshaw,

Burkeville, La

Hottelway Co.

## HAY FIELD

## PHOTOGRAPH NO. 6

This field

contained 5 acres, from which oats had been cut in June, 1908. The land was very thin, though had a good sub-soil of clay. It was broken in July, 1908, 8 inches deep. One ton of lime was applied to each acre, broadcast, immediately after plowing. A perfect seed bed was secured by frequent disking. From the 10th to the 15th of August 500 pounds of pure raw bone, to the acre, was applied and the following mixture of grass was used. Two parts timothy, two parts herds grass and one part sapling clover. (25 quarts to the acre) Seed were gotten in by running both ways a fine tooth harrow.

Harvested, June 25th. to July 5th.

## YIELD

4 tons to the acre.

Demonstrator--Dr. J. G. Ferneyhough,

Burkeville, va.

Hottoway Co.

## HAY FIELD

## PHOTOGRAPH NO. 7

This field was planted to corn and crimson clover was seeded at the last working, 1907. Clover was harvested May 10th 1908. Land was plowed in July 1908 and one ton of agricultural lime, applied broadcast, to the acre. A perfect seed bed was secured by frequent cultivation. The 10th of August 500 pounds of pure raw bone was applied to the acre and 10 quarts of timothy, ten quarts of berds grass and 5 quarts of sapling clover seed were used to the acre, with an addition of from 3 to 4 pounds of alfalfa seed to the acre. Harvested from June 25th to the 30th.

## YIELD

4 tons and 262 1/2 pounds to the acre.

Demonstrator--J. J. Gilliam,

parmyville, va.

prince Edward, co.

## GRASS CROP SEEDED IN 1908

No. of acres seeded	5
Date of breaking land	August 1st.
No. of inches land was broken	8
Give amount lime, if used.	400 pounds per acre
Kind of fertilizer used and quantity.	400 pounds Acid phosphate
Varieties of seed used	Timothy, Herds grass and sapling clover.
Amount of seed to the acre.	30 pounds.
COST OF CROP	
Cost of breaking land	\$ 6.25
Cost of lime used	\$11.00
Cost of preparation of land	\$ 8.75
Cost of fertilizer	\$13.00
Cost of seed and seeding	\$16.37
Cost of harvesting and storing	\$16.50
RECEIPTS.	
17 1/2 tons of hay at \$14.00 per ton.	\$245.00
Cost of production, deducted	\$ 71.87
	Net profit \$173.13
Demonstrator---C. F. Parsley, Westwood, Hanover Co., Va.	
Value of land adjoining land that was seeded to grass.	\$20.00 per acre.



## GRASS CROP SEEDED IN 1908

No. of acres seeded	7
Date of breaking land	August 1st.
No. of inches land was broken	8
Give amount of lime, if used	None.
Kind of fertilizer used	Pure raw bone.
Amount of fertilizer used	400 pounds per acre
Varieties of seed used	Timothy, Herds grass and sapling clover with an addition of 4 lbs. of alfalfa.
Amount of seed to the acre	25 quarts.

## COST OF CROP

Cost of breaking land	\$ 13.75
Cost of lime used	—
Cost of preparation of land	\$ 8.75
Cost of fertilizer	\$ 40.00
Cost of seed and seeding	\$ 36.00
Cost of harvesting and storing	\$ 14.00
Total cost	\$ 112.50

## RECEIPTS

28 tons of cured hay at \$15.00 per ton	\$ 420.00
Cost of production, deducted	\$ 112.50
Net profit	\$ 307.50

Name of demonstrator—Jos. A. Turner,  
Hollins, Va.  
Roanoke Co.

Value of land adjoining land that was seeded to grass \$10 to \$30 per acre.

## GRASS CROP SEEDED IN 1908

No. of acres seeded 4  
 Date of breaking land July 28 and 29, 1908  
 No. of inches land was broken 12 inches.  
 Give amount of lime, if used 5 3/4 tons on 4 acres.  
 Kind and quantity of fertilizer used Raw bone, 500 lbs.  
 Varieties of seed used Timothy, Red top, sapling  
 clover & alfalfa  
 Amount of seed to the acre 25 quarts

## COST OF CROP

Cost of breaking land	\$ 5.00
Cost of lime used	\$ 28.80
Cost of preparation of land	\$ 8.00
Cost of fertilizer	\$ 30.00
Cost of seed and seeding	\$ 20.00
Cost of harvesting and storing	\$ 10.00
Total cost	\$101.80

## RECEIPTS

15 tons of hay at \$15.00 per ton.	\$225.00
Cost of production, deducted	\$101.85
Net profit	\$123.15

Name of demonstrator-- J. T. Oliver,  
 Alens Level, Buckingham Co. Va.

Value of land adjoining land that was seeded to grass \$12.50 per  
 acre.

## GRASS CROP SEEDED IN 1908

No. of acres seeded 3  
 rate of breaking land Winter, 1908  
 No. of inches land was broken 8 inches  
 Give amount of lime, if used 2500 pounds  
 Kind of fertilizer used and quantity *Bone Meal*, 500 pounds  
 varieties of seed used Timothy, meadow grass and sapling clover.  
 Amount of seed to the acre 25 quarts.

## COST OF CROP

Cost of breaking land	\$ 5.00
Cost of lime used	\$ 10.00
Cost of preparation of land	\$ 3.00
Cost of fertilizer	\$ 22.50
Cost of seed and seeding	\$ 12.00
Cost of harvesting and storing	\$ 6.00
Total cost	\$ 58.50

## RECEIPTS

15 tons of hay at \$15.00 per ton.	\$ 225.00
Cost of production, deducted	\$ 58.50
Net profit	\$ 166.50

Name of Demonstrator J. L. Carter,  
 CHATHAM, Pittsylvania Co. Va.

## Report of Progress, (Continued)

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GRASS CROP SEEDED IN 1908

No. of acres seeded

10

Date of breaking land

August, 1907

No. of inches land was broken

15 in.

Givé amount of lime, if used

10 tons.

Kind and quantity of fertilizer used to the acre

500

*Ho. Fair Bone*Varieties of seed used, Timothy, herds grass, sapling  
clover and alfalfa

Amount of seed to the acre

25 quarts.

## COST OF CROP

Cost of breaking land and sub-soiling

\$ 60.75

Cost of lime used

\$ 42.00

Cost of preparation of land

\$ 12.00

Cost of fertilizer

\$ 78.00

Cost of seed and seeding

\$ 47.14

Cost of harvesting and storing

\$ 25.00

Total cost

\$264.89

## RECEIPTS

30 tons of hay at \$15.00 per ton

\$450.00

Cost of production, deducted

\$264.89

Net profit

\$185.11

Name of demonstrator

H. T. Taylor,

Prospect, Prince Edward, Va.

## GRASS CROP SEEDED IN 1908

No. of acres seeded \_\_\_\_\_

Date of breaking land August, 1908

No. of inches land was broken 8

Give amount of lime used 1000 lbs.

Kind of fertilizer used. Pure raw bone and Acid phosphate.

Amount of fertilizer used; 400 bone meal 200 acid phosphate.

Varieties of seed used. Timothy, Herds grass, sapling clover and six pounds of alfalfa seed.

Amount of seed to the acre 25 quarts.

## COST OF CROP

Cost of breaking land	\$ 10.00
Cost of lime used	\$ 10.00
Cost of preparation of land	\$ 7.50
Cost of fertilizer	\$ 37.50
Cost of seed and seeding	\$ 30.00
Cost of harvesting and storing	\$ 15.00
	-----
Total cost.	\$110.00

## RECEIPTS

25 tons of hay at \$15.00 per ton	\$375.00
Cost of production	\$110.00
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Net profit	\$265.00

Name of demonstrator W. H. Pettus,

Prakes Branch, Charlotte Co., Va.

Value of land adjoining land that was seeded to grass \$20.00 for farming purposes

## GRASS SEEDED IN 1908

No. of acres seeded	2 3/4
Date of breaking land	July 15th to the 20th. 1908
No. of inches land was broken	10
Give amount of lime used	None.
Kind of fertilizer used	Pure raw bone and Acid phosphate
Amount of fertilizer used, per acre	500 pounds
Varieties of seed used	Timothy, red top and sapling clover.
Amount of seed to the acre	52 quarts.

## COST OF CROP

Cost of breaking land	\$ 6.00
Cost of preparation of land	\$ 6.00
Cost of fertilizer	\$14.00
Cost of seed and seeding	\$ 8.00
Total cost	-----\$42.00-----

## RECEIPTS.

9 tons of hay at \$18.00 per ton.	\$162.00
Cost of production, deducted	\$ 42.00
Net profit	-----\$120.00-----

Demonstrator-- R. B. Stone,  
Blackstone, Nottoway Co. Va.

Value of land adjoining land which was seeded to grass, \$15.00 per acre.

## GRASS CROP SEEDED IN 1908

No. of acres seeded.	50
Date of breaking land.	July, 1908
No. of inches land was broken.	8
Give amount of lime, if used.	None
Kind of fertilizer used.	Bone meal
Amt. of fertilizer used to the acre.	500 pounds.
Varieties of seed used.	Timothy, herds grass, sapling clover and a small amount of alfalfa
Amount of seed to the-acre.	20 quarts.

## COST OF CROP.

Cost of breaking land	\$ 50.00
Cost of lime used	\$
Cost of preparation of land.	\$ 40.00
Cost of fertilizer	\$225.00
Cost of seed and seeding	\$180.00
Cost of harvesting and storing.	\$100.00
Total cost	\$595.00

## RECEIPTS.

100 tons of hay at \$16.00 per ton.	\$ 1600.00
Cost of production deducted	\$ 595.00
Net profit.	\$1005.00

Name of demonstrator--Lewis S. Jackson,  
Prakes Branch,  
Charlotte Co., Va.

Value of land containing land that was seeded to grass, \$10.00 per acre.

## GRASS CROP SEEDING IN 1908.

No. of acres seeded  
Date of breaking land August 1st. 1908

No. of inches land was broken.

Give amount of lime, if used. Half ton of rock lime.

Kind of Fertilizer used. 500 pounds of raw bone and 200 pounds of nitrate soda.

Varieties of seed used. Heron grass, timothy and sapling clover.

Amount of seed to the acre. 22 quarts.

## COST OF CROP.

Cost of breaking land.	\$ 3.00
Cost of lime used	\$ 5.50
Cost of preparation of land.	\$ 1.50
Cost of fertilizer	\$12.00
Cost of seed and seeding	\$ 4.50
Cost of harvesting and st. "1 g.	\$5.00
Total cost	\$31.50

## RECEIPTS.

5 tons of hay at \$16.00 per ton.	\$80.00
Cost of production, deducted.	\$31.50
Net profit	\$48.50

Name of demonstrator - Dr. Tom Kenning,  
Jefferson, Va.,  
Powhatan Co.

Value of land adjoining land that was seeded to grass.  
\$8.00 per acre.

## Report of Progress (Continued)

#22

## GRASS CROP SEEDING IN 1908

No. of acres seeded	1
Date of breaking land	July, 1908
No. of inches land was broken.	8
Give amount of lime, if used.	600 pounds.
Kind of fertilizer used.	Pure raw bone.
Amount of fertilizer used, to the acre.	400 pounds.
Varieties of seed used.	Timothy, herds grass, sapling clover and alfalfa.
Amount of seed to the acre.	27 quarts.

## COST OF CROP

Cost of breaking land	\$ 2.00
Cost of lime used	\$ 2.50
Cost of preparation of land.	\$ 2.00
Cost of fertilizer	\$ 6.00
Cost of seed and seeding.	\$ 2.50
Cost of harvesting and storing	\$ 4.00

Total cost	\$19.00
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## RECEIPTS.

2 tons and 200 pounds to the acre. \$16.00 per ton.	\$33.00
Cost of production, deducted.	\$19.00
Net profit.	\$14.00

Name of demonstrator - W. A. Moss,  
 Dilley, Va.  
 Surfinger Co.

## COW PEAS

Peas have been extensively seeded both for hay and for the improvement of the soil. We have in some instances advocated seeding peas and crimson clover, mixed, at the last working of the corn crop and we find it satisfactory. Soy beans and peas, mixed, make a fine hay, as well as a good pasturage for hogs.

## WINTER PASTURAGE

Crimson clover, vetch and turnips (the small white turnip) are being demonstrated for pasturage and it has, at this time, given promise of being a success.

## HORSES

The improvement of farm horses is being given attention now, to a great extent. 3 or 4 heavy stock horses have been bought during the 1st year in our territory. The light horses are giving place to heavier work horses.

## DAIRYING

By the efforts of our demonstration work dairying has been brought to the attention of our farming people and they are more interested than I ever dared hope. They are making every effort to improve their herds. Bulls of the milk producing strains are being bought. Directly around Burkeville, Kottway Co. Va. 5 thorough bred bulls have been gotten. Gernsey, Jersey and Holstein. The Burkeville creamery created confidence in the enterprise and now there is one at Lawrenceville, South Boston, Farmville, Cumberland and Charlottesville and many more in contemplation. Cows are being brought to these points in car load lots, from North, South and west. New barns, milk houses and silos, of

modern type, are being built all over our territory.

#### HOGS

The raising of hogs is becoming quite an enterprise. With the introduction of crimson clover, peas and soy beans they can be cheaply raised. Pure bred Sires of the best strains are being bought all over our section.

#### PUBLIC MEETINGS.

We have held meetings in nearly all of the counties we are working. These meetings bring the people together and creates a growing interest in our demonstration work. At a farmers meeting at Burkeville and one near Farmville, deep plowing and sub-soiling were demonstrated. Corn Day in some instances has created a desire to get a better quality and a larger yield. As a result the farmers are nearly all field selecting their seed corn this year. The Dairy meetings, we have held, have been quite a success. It gives an opportunity to discuss and exchange ideas on dairy topics.

#### COOPERATION

No co-operation with State Board of Agriculture. We work with the schools. By co-operating with the schools we think the greatest good can be accomplished. Virginias best farmers are to be trained in their youth.

**MACHINERY.**

All kinds of machinery have been introduced in our territory, as a result of the farmers' Co-operative demonstration work, gasoline engines, feed cutters, corn harvesters, wheat drill and binders, Disc and cut-a-way harrows, sulky harrows, double horse corn cultivators, corn planters, fertilizer distributors, disc plows, riding plows, manure spreaders, wood saws, and cream separators. 19 cream separators and 26 silos have been bought, in connection with the Burkeville and Farmville creameries and a safe estimate, with the other three already in operation, would foot up 65 silos and 45 cream separators. The largest agricultural dealers in Richmond and Petersburg, Va. report their sales have doubled during the last 2 years.

**DEMONSTRATION WORK.**

The farm of Mr. Jno. T. Lewis,  
Clarksville, Va.  
Hecalenburg, So.

On this farm the old tenant system had been used for years, the land barely producing enough to pay the cost. In June, 1908 Mr. Lewis followed our method of raising hay and seeded 20 acres. He harvested about 60 tons of good, clean hay. This year he demonstrated on corn, sub-soiling and working exactly by demonstration method. He has now promise of 50 bushels of corn, to the acre, and the corn land seeded to crimson clover. This fall, 1909, he has seeded 25 acres in mixed grasses by demonstration method and he says in a few years, by raising cattle (he has added a pure bred sire to his herd) feed

from his own farm, also the sale of hay, he can make a success of farming. The people in his neighborhood have caught the spirit and are going to him for advice, when one year ago his opinion would not have been considered authority on agricultural subjects.

#### SCHOOL BOYS DEMONSTRATION WORK.

All of the Agents, when an opportunity presents itself, try to interest the school boys in the demonstration work, to get them more interested in farming and farm life. F. S. Farrar, J. J. Gilliam and E. P. Spain have paid especial attention to the school boys work. They have, to this date, 66 School Boy demonstrators. These boys will exhibit at the Richmond and Petersburg Fairs. The school girls too are interested and will exhibit their sewing, bread, preserves, pickles, jams, jellies, etc.

Note--The agricultural fair at Petersburg and Powhatan have been gotten up entirely by District Agent, F. S. Farrar and his Local Agents, in the interest of the demonstration work, school boys included. The fair at Powhatan on September 25th was a success, in every sense of the word. I have never seen a better exhibit of corn at any fair, and the exhibit of hay was fine. The county people were thoroughly interested. Horses, hogs, sheep, poultry and all farm products were on exhibition. The farmers' wives also had a creditable display of their skill.

J. D. Sandy State Agent