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VIRGINIA

ANIMAL HUSBANDRY ANNUAL REPORT 1944

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AM-15

RETURN TO
EXTENSION
 DIVISION OF FIELD
 STUDIES & TRAINING

REPORT

ANIMAL HUSBANDRY DEPARTMENT

EXTENSION DIVISION

Virginia Polytechnic Institute

December 1, 1943

to

November 30, 1944

to

John R. Hutchison, Director Extension

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ANNUAL REPORT

VIRGINIA

ANIMAL HUSBANDRY EXTENSION DIVISION

December 1, 1943 - November 30, 1944

Personnel

George C. Herring, Extension Animal Husbandman

Paul Swaffar, Assistant Extension Animal Husbandman

George W. Litton, Assistant Extension Animal Husbandman

M.L. Dalton, Assistant Extension Animal Husbandman

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Division of Time and Responsibility**

During the period covered by this report, Herring (full time specialist), had charge of the Better Sires Project and swine work; Swaffar (full time to July 1, part time thereafter), had charge of the beef cattle program; Litton (employed during the summer quarter), worked on ram sales and other phases of the sheep program; and Dalton (employed October 15 to November 30), worked on the beef cattle program. While each had a definite responsibility one helped with projects of the other as the need for such arose.

The Livestock Situation

Weather and crop conditions as a whole were unfavorable in 1943. Acreage planted was 4% above the ten-year average, but yields were low. Total production of small grains was 11% below 1942 and 5% below the ten-year average. There was a record acreage of hay crops but production was 5% below 1942. Production of corn was 6% below 1942. Pasture conditions were very poor from midsummer on. Poor crops and pasture conditions, high feed costs, and the difficulty in buying feed along with large livestock numbers caused considerable difficulty during late 1943 and 1944.

The number of horses on Virginia farms January 1, 1944, was 161,000 head, 2% below the previous year. Total valuation, however, was \$18,583,000 as compared to \$16,949,000 January 1, 1943.

January 1, 1944, mules of all ages were estimated at 85,000 head, a 2% reduction from the previous year. Per head, valuation was \$178.00 as compared to \$147.00 the year before. Total valuation at the beginning of 1944 was \$ 15,111,000.

There were 1,058,000 head of cattle and calves on Virginia farms January 1, 1944, a 5% increase over the year before. Beef cattle showed a somewhat larger increase than dairy cattle. Average value per head of all cattle was \$70.80 as compared to \$66.50 the year before. Total value of all cattle at the beginning of the year was \$74,905,000.

On January 1, there were 353,000 sheep on farms, down 2%. Value per head declined from \$11.20 to \$10.20. Total value January 1 was \$3,589,000.

The 970,000 hogs on farms January 1 represent the largest inventory on record. The number was 12% above the previous year and 49% above the 1933-42 average. Average value was \$11.10 as compared to \$16.90 January 1, 1943. Total value at the beginning of 1944 was \$10,743,000.

Total livestock numbers, excluding poultry, increased from 2,416,000 head January 1, 1943, to 2,627,000 head January 1, 1944. Valuation during the same period increased from \$113,830,000 to \$127,931,000. There appears to be little question but what peak numbers were recorded at the beginning of the year and probably peak valuation as well.

Feed production and pasture conditions in 1944 were again unfavorable in some respects. Small grain production was above normal and corn production near normal, but hay and pasture were severely damaged by drought during the summer. Such conditions caused a heavy liquidation of cattle and sheep in areas where dry weather was most severe. Liquidation of hogs was greatest through the first six months of the year. Gross sales from livestock and livestock products remained high in 1944, but profits from such sales were not always satisfactory to producers.

Development of an Animal Husbandry Program

A program in animal husbandry in wartime must of necessity be flexible. The meeting of livestock goals and exceeding them where it was practical to do so was, of course, of first consideration. Supplying information helpful toward maximum production of livestock, overcoming difficulties occasioned by feed shortages, labor problems, drought, and market gluts continued to be a part of the program in 1944 as it was in 1943. It was also considered important to retain projects and carry on work which might be helpful in the post-war period. Continued improvement in the quality of livestock and getting livestock production on a sound basis so that it would survive less favorable conditions was given considerable attention in 1944.

The livestock outlook and needs in meat animal production were presented at the annual conference in November of 1943. In February of 1944 district meetings of county agents were held at which time county agents discussed their programs and specialists were present so that needed help could be requested.

General Wartime Program

Meeting Livestock Goals:

The Virginia hog production goal for 1944 called for a combined farrow (spring and fall) of 198,000 sows. The goal for the spring farrow was just about met, but the fall farrow dropped considerably below the goal. The total numbers of sows farrowing in 1944 was estimated at 183,000 sows. In view of conditions, producers were probably better off with the smaller number.

The beef cow goal for 1944 (January 1, 1945) was 83,000 head and although there was some liquidation, it is believed this goal was exceeded. The average number of beef cows on farms during the 1937-41 period was estimated at 47,000 head. Increases were very rapid up to 1944, but smaller ones can now be expected.

The sheep goal calling for an increase in sheep numbers January 1, 1945, were not met, although it appears an increase at the expense of cattle numbers would be desirable. Actually, however, further liquidation took place in part due to dry weather, but good cattle prices and favorable prices for dairy products no doubt were factors.

Goal Meetings Attended by Animal Husbandry Specialists

<u>No.</u>	<u>Type</u>	<u>Attendance</u>
1	State Training Meeting - Agricultural Goals	50
<u>15</u>	<u>County Meetings on Agricultural Goals</u>	<u>943</u>
16		993

Following the county meetings, community meetings were held in all counties of the state to discuss the county goals, the outlook, and good production methods for livestock and crops.

Partly as a result of drought conditions which prevailed in midsummer, another series of county meetings was held in early August. As in the winter meetings, teams of three men representing different agricultural agencies of the state went to all counties after a training meeting was held. At the county meetings specific livestock and crop recommendations were made and AAA practices affecting production were discussed.

Livestock-Feed Meetings Attended by Animal Husbandry Specialists

<u>No.</u>	<u>Type</u>	<u>Attendance</u>
1	Training Meeting	35
<u>16</u>	Meetings of County Leaders	<u>550</u>
17		585

Livestock Schools:

County livestock schools were organized where desired and time permitted. At such meetings the outlook and goals were discussed along with good production practices and control of diseases and parasites.

<u>No.</u>	<u>Type of School</u>	<u>Attendance</u>
3	Beef Cattle - Hogs - Sheep	95
<u>4</u>	Hog Production	<u>140</u>
7		235

The above were all-day meetings.

Neighborhood Leader System:

Much information relating to livestock production in written was carried to farmers through the neighborhood leader system. Items were prepared every month for the Neighborhood Leaders' Digest and other material was prepared for the use of professional agricultural workers.

Better Sires Project

The Better Sires Project was continued in the same form as past years. While the spread between the upper and lower grades of market animals has often been narrow during the war due to the demand for all meat animals and price regulations, a few years hence a normal spread may be expected. Producers should, therefore, improve herds and flocks while income from livestock is favorable and extension workers should give as much assistance as possible in such improvement.

The project is in the form of a contest among counties. Results are based on the number of purebred beef bulls, rams, and boars placed.

Specialists' assistance consisted largely in helping with auction sales at which purebred sires were sold, advising producers where sires could be obtained, supervision of the contest, and preparation of material.

Sales of Registered Bulls

<u>Breed</u>	<u>No. Sales</u>	<u>No. Bulls</u>	<u>Average Price</u>
Aberdeen-Angus	10	72	\$ 452.20
Hereford	7	57	196.73
Shorthorn	3	21	256.35
Total	21	150	\$ 322.77

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Auction Sales of Registered Hams

		Dorsets:	Chev.:	Shrop.:	S.Down:	Hamp.:	Sale Ave.	Total amount
Abingdon	July 6	-	-	-	-	45	\$ 38.55	\$ 1,735.00
Christiansburg	" 8	-	-	-	4	32	38.64	1,391.00
Mytherville	" 18	-	-	-	1	26	35.15	949.00
Orange	" 19	-	-	3	1	18	30.85	678.50
Berryville	" 20	-	-	5	-	16	40.00	640.00
Lebanon	" 20(nite)	-	-	3	-	4	42.66	298.50
Bristol	Aug. 4	-	-	-	-	14	23.80	333.00
Harrisonburg	" 5	-	2	7	2	15	23.96	647.00
Staunton	" 9	2	-	19	12	28	39.60	2,178.00
		<u>2</u>	<u>2</u>	<u>31</u>	<u>20</u>	<u>198</u>		<u>\$ 9,050.00</u>

Total Hams - 253 - Average - \$35.77

Dorsets:	Chev.:	Shrop.:	S.Down:	Hamp.:
2-\$64.00	2-\$36.00	13-\$334.00	12-\$464.50	28 - \$1,315.50
		3- 88.50	4- 137.50	45 - 1,735.00
		5- 138.00	1- 40.00	32 - 1,253.50
		3- 85.00	1- 24.00	14 - 333.00
		7- 139.00	2- 30.00	26 - 909.00
				4 - 210.00
				16 - 702.00
				18 - 569.50
				15 - 442.00
<u>2-\$32.00</u>	<u>2-\$18.00</u>	<u>31-\$25.30</u>	<u>20-\$34.80</u>	<u>198-\$ 7,469.50</u>

Average Price by Breeds -

Dorset	-	\$32.00
Chevet	-	18.00
Shrop.	-	25.30
S.Down	-	34.80
Hamp.	-	37.72

Auction Sales of Purebred Boars

Five sales at which registered boars were sold were held in 1944 with average prices much below those of 1943. The average price at which boars sold in 1940 was \$14.77; in 1941, \$22.93; in 1942, \$35.98; and in 1943, \$45.92. The average age of boars at the time of sale is about 4½ months.

Results of Boar Sales

<u>Place</u>	<u>No. Head</u>	<u>Average Price</u>	<u>Total Amount</u>
Suffolk (winter)	41	\$ 31.25	\$ 1,281.50
Winchester (winter)	12	24.41	293.00
Staunton (winter)	22	24.86	547.00
Suffolk (summer)	44	25.94	1,141.50
Winchester (summer)	13	28.27	367.50
Staunton (summer)	14	25.14	352.00
Total (6)	146	\$ 27.27	\$ 3,982.50

Results Better Sires Work 1944

<u>County</u>	<u>Beef Bulls</u>	<u>Hams</u>	<u>Boars</u>	<u>Total</u>
Augusta	13	28	5	46
Bland	20	22	10	52
Botetourt	4	-	1	5
Buckingham	7	3	3	13
Carroll	9	7	14	30
Clarke	2	10	-	12
Culpeper	15	5	5	25
Floyd	22	2	1	25
Giles	22	20	1	43
Grayson	80	23	12	115
Highland	25	9	3	37
Ide of Wight	-	-	24	24
Lee	30	3	1	34
Louden	3	5	3	11
Madison	20	2	1	23
Montgomery	25	26	3	54
Nansemond	-	-	17	17
Page	27	9	11	47
Patrick	12	9	16	37
Rockbridge	4	11	3	18
Russell	55	60	-	115
Scott	27	5	-	32
Shenandoah	8	8	3	19
Smyth	28	27	-	55
Southampton	-	1	23	24
Sussex	-	-	11	11
Washington	25	32	7	71
Total (27)	483	334	178	995

Results of better sires work in 1944 appear to be less satisfactory than for several years. In 1943, 1,400 purebred sires were reported placed in 35 counties. The liquidation of livestock in 1944 perhaps had something to do with it, but of more importance was the incompleteness of reports which was no doubt due to changes in personnel and the large amount of time required of county agents in wartime activities.

Report of Sires Placed by Breeds

Beef Bulls	Angus	81	
	Hereford	364	
	Shorthorn	38	
	Total		483
Rams	Hampshire	229	
	Southdown	82	
	Shropshire	14	
	Dorset	8	
	Suffolk	1	
	Total		334
Boars	Berkshire	26	
	Duroc Jersey	46	
	Hampshire	28	
	Poland China	54	
	Spotted Poland China	10	
	O.I.C.	10	
	Tamworth	3	
	Yorkshire	1	
Total		178	
Total All Sires			995

The above figures to some extent indicate the relative popularity of the various breeds of livestock in Virginia.

Results Better Sires Project 1935-1944

<u>Year</u>	<u>Beef Bulls</u>	<u>Rams</u>	<u>Boars</u>	<u>Total</u>
1935	268	487	71	826
1936	166	450	110	726
1937	315	581	65	961
1938	360	574	114	1,048
1939	414	674	179	1,267
1940	494	531	176	1,201
1941	551	483	166	1,199
1942	599	541	195	1,335
1943	627	498	273	1,400
1944	483	334	178	995
Total	4,277	5,153	1,527	11,029

Beef Cattle Program

Cattle numbers on farms in Virginia were at an all time high at the beginning of the year with slightly over 1,000,000 head being reported on January 1.

In view of the supplies and in view of feed shortages in some areas, the following special recommendations were made to beef producers:

1. Cull breeding herds rigidly.
2. Feed market cattle only to good grade since there is no premium for more highly finished cattle.
3. Market more low quality calves as veals rather than retaining these for stocker and feeder purposes.
4. Market a higher percentage of heifer calves directly to butchers, and replace older cows in breeding herds with the best heifer calves.
5. Reduce all types of beef herds to feed production.

These special recommendations were made through production goals meetings, through publicity, radio, breed association meetings, and regularly scheduled feeding schools.

The regular educational program for beef cattle encouraged improvement in Virginia by the following general recommendations:

1. Use of only registered beef-type bulls.
2. Cooperative pooling, grading, and selling of stocker and feeder calves.
3. Increasing beef cow herds where adapted and where feed conditions permit.
4. Improvement of purebred and commercial beef herds, by culling and better management practices, and by assistance to breed associations in their sales and other activities.
5. Control of diseases and parasites through use of recommended control methods.

Use of Registered Bulls:

The use of registered beef-type bulls was encouraged by the promotion of bull sales, by cooperating with breed associations, through the Better Sires Project, and through regular meetings and publicity. The department assisted with the management and promotion of 18 auction sales in which 163 bulls were sold for an average of \$322.77.

Cooperative Stocker and Feeder Calf Sales

Cooperative pooling, grading, and selling of stocker and feeder calves is considered one of the most valuable beef cattle demonstration projects. These sales are sponsored by local incorporated associations of calf producers assisted by county agents and animal husbandry specialists. Calves were officially graded by representatives of the Virginia Division of Markets and were sold according to grade. This method of selling encourages quality production and enables buyers to secure uniform lots.

In 1944, 16 sales were held in which 5681 head were sold for a total of \$279,215.28. This volume represents a decrease from 1943 which showed 7368 sold for \$389,362.58. The decrease can be accounted for largely by drought conditions which forced considerable liquidation during midsummer of calves that normally would have been saved for fall sale.

Summary of Virginia Feeder Calf Sales - 1944

<u>Breed</u>	<u>Grade</u>	<u>No.</u>	<u>Average Weight</u>	<u>Average Price</u>	
				<u>Per Head</u>	<u>Per Cwt.</u>
Angus	Choice	247	469	\$ 62.80	\$ 13.39
Hereford	"	283	438	58.14	13.27
Shorthorn	"	2	465	63.75	13.71
Angus x Shorthorn	"	4	498	64.15	12.89
Hereford x Shorthorn	"	1	330	42.24	12.80
Angus	Good	486	422	53.19	12.60
Hereford	"	792	416	52.70	12.66
Shorthorn	"	11	529	58.80	11.12
Angus x Hereford	"	48	439	50.08	11.41
Angus x Shorthorn	"	4	556	75.65	13.60
Hereford x Shorthorn	"	13	388	45.93	11.85
Angus	Medium	330	413	48.75	11.80
Hereford	"	772	406	46.80	11.53
Shorthorn	"	30	408	41.49	10.17
Angus x Hereford	"	64	415	46.45	11.20
Hereford x Shorthorn	"	3	365	40.99	11.12
Angus	Common	44	424	40.70	9.62
Hereford	"	138	414	40.42	9.76
Shorthorn	"	8	429	33.43	7.80
Angus x Hereford	"	10	435	42.13	9.68
Hereford x Shorthorn	"	2	387	35.37	9.13
Total		3,292			
Average			421	\$ 51.22	\$ 12.16
All Angus	All Grades	1,107	430	\$ 53.52	\$ 12.44
All Herefords	" "	1,985	415	50.33	12.12
All Shorthorns	" "	51	440	44.84	10.20
All Crossbreeds	" "	149	426	48.25	11.34
All Breeds	Choice	537	453	\$ 60.32	\$ 13.39
All Breeds	Good	1,354	430	52.84	12.57
All Breeds	Medium	1,199	408	47.17	11.55
All Breeds	Common	202	418	40.24	9.63

Summary of Virginia Feeder Calf Sales - 1944

Breed	Grade	No.	Average Weight	Average Price	
				Per Head	Per Cwt.
Angus	Choice	144	437	\$ 52.91	\$ 12.12
Hereford	"	145	404	49.23	12.18
Shorthorn	"	2	437	52.67	11.31
Angus x Shorthorn	"	1	430	52.46	12.30
Angus x Hereford	"	6	454	49.25	10.84
Hereford x Shorthorn	"	1	410	45.51	11.10
Angus	Good	254	423	48.91	11.56
Hereford	"	679	389	46.15	11.87
Shorthorn	"	8	429	47.89	11.15
Angus x Hereford	"	40	400	43.26	10.85
Angus x Shorthorn	"	1	475	57.47	12.10
Hereford x Shorthorn	"	13	424	50.93	12.00
Angus	Medium	173	393	43.18	10.99
Hereford	"	625	394	42.50	10.80
Shorthorn	"	12	421	45.34	10.76
Angus x Hereford	"	23	374	40.00	10.69
Hereford x Shorthorn	"	8	384	41.48	10.81
Angus	Common	63	407	37.86	9.29
Hereford	"	114	421	36.14	8.59
Shorthorn	"	1	470	36.19	7.70
Angus x Hereford	"	7	420	38.93	9.27
Hereford x Shorthorn	"	1	430	39.13	9.10
Total		2,321			
Average			401	\$ 45.04	\$ 11.23
All Angus	All Grades	634	416	\$ 47.16	\$ 11.33
All Herefords	" "	1,563	395	44.25	11.21
All Shorthorns	" "	23	429	46.46	10.82
All Crossbreeds	" "	101	402	43.54	10.83
All Breeds	Choice	399	421	\$ 51.02	\$ 12.11
All Breeds	Good	993	399	46.83	11.74
All Breeds	Medium	841	393	42.60	10.83
All Breeds	Common	186	417	36.84	8.84
<u>Miscellaneous</u>					
Hereford Reg. Bull Calves	Avg. Good	13	522	\$ 78.13	\$ 14.96
Hereford Yearling Steers	" "	51	794	94.84	11.94
Registered Angus Bulls	Good	2	487	53.62	11.00
Registered Angus Heifers	Good	2	445	80.06	11.24

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Cow and Calf Herds:

The trend away from steers to cow and calf herds continued. The average number beef cows on Virginia farms during the period 1937-1941 was 47,000. On December 31, 1943, the number reported was 77,000 and it was indicated there would be 8000 on December 31, 1944.

While this increase is in line with the department's recommendations, and while it is considered sound for most farms, the problem of disposing of heifer calves is becoming increasingly important. Producers were, therefore, encouraged to market more heifer calves directly to butchers. This practice was generally followed as indicated by the fact that it is estimated that no less than 80% of the heifer calves selling through the regular feeder calf sales went directly to butchers.

Good management practices to cow herd producers were recommended through meetings and publicity.

Improvement in Breeding Herds and Registered Cattle Sales:

Members of the department conducted numerous culling demonstrations, and cooperated closely with state purebred breeders' associations in promoting herd improvement and registered sales. Assistance was given in selecting sale consignments, advice about culling and herd additions, and assisting with sales management.

Eighteen (18) sales of registered cattle were held during the year in which 981 cattle were sold for a total of \$ 288,714.98.

Feeding:

More efficient feeding of beef cattle is encouraged through publicity, by preparation of feeding material, by assistance with fat cattle shows, and through feeding schools. Special attention is given to the following points in this program:

1. Use of properly balanced rations, giving special attention to home-grown feeds.
2. Creep feeding calves and especially heifer calves to be marketed at the end of the grazing season.
3. Fat cattle shows for both club and adult feeders.
4. Presenting balanced feeding schedules through meetings and publicity.

Control of Diseases and Parasites:

Other than emphasizing the need for parasite control in regular meetings and regular publicity, no special disease or parasite control program was emphasized. More special work in such controls needs to be done.

Cooperative Purebred Beef Cattle Sales in 1944

April 8 - Asheret	7 Bulls	\$542.00	\$3,795.00
Aberdeen-Angus	46 Females	291.00	13,385.00
April 12 - Roanoke	7 Bulls	399.00	2,795.00
Hereford	48 Females	567.00	27,200.00
April 20 - Staunton	9 Bulls	314.00	2,825.00
Aberdeen-Angus	54 Females	291.00	15,715.00
April 29 - Winchester	12 Bulls	264.00	3,167.50
Pollad Shorthorn	37 Females	295.00	10,915.00
May 8 - Orange	9 Bulls	308.00	2,772.50
Aberdeen-Angus	64 Females	251.00	16,065.00
May 20 - Winchester	5 Bulls	193.70	968.50
Aberdeen-Angus	17 Females	150.47	2,557.99
Hereford	4 Bulls	187.75	751.00
Shorthorn	4 Bulls	238.00	952.50
	1 Female	175.00	175.00
May 31 - Berryville	7 Bulls	402.00	2,815.00
Aberdeen-Angus	45 Females	306.00	13,770.00
September 16 - Blacksburg	7 Bulls	307.00	2,150.00
Aberdeen-Angus	32 Females	231.00	7,392.50
October 9 - Warrenton	3 Bulls	4,717.00	14,150.00
Aberdeen-Angus	33 Females	649.00	21,415.00
October 13 - Charlottesville	5 Bulls	322.00	1,610.00
Hereford	44 Females	267.00	11,760.00
October 16 - Ewing	7 Bulls	186.00	1,302.50
Hereford	42 Females	156.00	6,552.50
October 27 - Staunton	6 Bulls	272.00	1,630.00
Hereford	43 Females	487.00	20,925.00
October 30 - Orange	6 Bulls	200.00	1,200.00
Aberdeen-Angus	54 Females	195.00	10,530.00
October 31 - Warrenton	6 Bulls	118.00	707.50
Hereford	48 Females	209.00	10,052.50
October 31 - Staunton	6 Bulls	139.00	835.00
Aberdeen-Angus	45 Females	132.00	5,940.00
November 1 - Asheret	13 Bulls	136.00	1,767.50
Aberdeen-Angus	49 Females	182.00	8,920.00
November 3 - Staunton	8 Bulls	254.00	2,032.50
Shorthorn	41 Females	426.00	17,465.00
November 11 - Taxewall	32 Bulls	137.00	4,385.00
Hereford	64 Females	192.00	12,290.00
Total (18)	163 Bulls	\$322.77	\$52,612.00
	818 Females	\$288.63	\$236,102.98

Sheep Program

The number of sheep on Virginia farms January 1, 1944, is estimated at 353,000 head as compared to 495,000 head for the same date of 1932. A reversal of the downward trend seems desirable but it is hardly likely to occur until there is a decline in cattle prices.

The sheep program is as follows:

1. Use of purebred rams of acceptable type.
2. Treatment for internal parasites.
3. Dipping to control external parasites, using portable vats where permanent vats are not available.
4. Castration of lambs at proper time.
5. Proper shearing and preparation of fleeces.
6. Cooperative marketing of wool.
7. Official state grading of market lambs and cooperative marketing where needed.
8. Marketing lambs at heavier weights.
9. Better feeding of ewe flocks, using legume hay as a basis.
10. Improvement of registered flocks through meetings of breeders, shows, sales, and visits.
11. Organized 4-H sheep club projects.

Use of Purebred Rams:

Auction sales of registered rams sponsored by the two sheep breeders' organizations, of which a member of the department acts as secretary, have been the most effective means used in getting more good rams in the hands of commercial producers. At the nine sales held in 1944, 353 rams sold for an average price of \$35.77. In 27 counties taking an active part in the Better Sires Project 334 purebred rams were reported placed.

Internal Parasite Control:

Phenothiazine began to be recommended as a treatment for internal parasites in 1940 and it is now widely used, both as a drench and by the salt-lick method. It has given excellent results.

A total of 4,370 copies of the leaflet, "Molecular Worm Control", prepared by the National Livestock Conservation Program, was distributed in 31 counties in 1944.

The following report of sheep treated one or more times by the salt-lick method indicates that about 60% of the sheep are treated with phenothiazine:

Treatments with Phenothiazine

Augusta	22,000	Louden	1,800
Bland	6,000	Lee	1,000
Carroll	27,000	Madison	2,500
Calpeper	2,000	Page	1,000
Clarke	1,500	Rockbridge	6,800
Fauquier	2,500	Russell	20,000
Floyd	2,492	Scott	2,500
Giles	6,000	Smyth	4,500
Grayson	7,500	Shenandoah	690
Highland	3,600	Washington	3,200
		Total (20)	<u>122,582</u>

Treatment for External Parasites:

There are 15 portable dipping vats in Virginia and several counties have community vats. Several counties report that they were unable to secure satisfactory operators for the portable vats and as a result, the program was not as effectively carried out as it had been in past years.

Sheep Dipped in Portable Vats:

Augusta	5,600
Clarke	2,692
Calpeper	300
Fauquier	500
Highland	2,887
Louden	665
Madison	150
Rockbridge	2,100
Russell	2,200
Shenandoah	1,980
Scott	325
Total (11)	<u>19,399</u>

Castration of Buck Lambs:

The practice continues to be recommended but no figures are available on the extent to which the practice is carried out.

Cooperative Marketing of Wool:

Growers realize greater returns for wool marketed cooperatively than otherwise. Most county pools sold through the United Wool Growers' Association but a number of counties sold through other primary handlers for the Commodity Credit Corporation.

Tonnage of Wool Sold by United Wool Growers in 1944

<u>County</u>	<u>Net Clear</u>	<u>Rejects</u>
Albemarle	16,201 lbs.	1,084 lbs.
Alleghany	12,867 "	2,792 "
Augusta	28,896 "	3,027 "
Bedford	7,848 "	2,343 "
Clarke	8,549 "	1,907 "
Craig	11,481 "	207 "
Culpeper	11,902 "	1,379 "
Fauquier	22,903 "	2,107 "
Floyd	8,844 "	656 "
Giles	28,054 "	2,962 "
Lee	6,862 "	1,498 "
London	7,146 "	1,422 "
Lynchburg	16,864 "	8,850 "
Montgomery	31,032 "	1,950 "
Orange	17,783 "	1,374 "
Page	7,817 "	1,655 "
Richmond	65,149 "	16,511 "
Pulaski	20,368 "	1,542 "
Rappahannock	13,212 "	169 "
Rockbridge	22,068 "	1,960 "
Rockingham Farm Bureau	42,550 "	3,576 "
Scott	13,151 "	702 "
Frederick	47,418 "	2,316 "
Shenandoah	22,609 "	1,338 "
Wythe	11,330 "	1,046 "
Total (25)	502,904 lbs.	64,373 lbs.

County Pools Handled Independently

<u>County</u>	<u>Amount</u>	<u>Price</u>
Blaine	14,209 lbs.	\$.50
Carroll	11,454 "	.54
Grayson	26,222 "	.54
Patriek	2,782 "	.54
Russell	89,842 "	.52
Smyth	135,342 "	.52
Washington	69,925 "	.50
Total (7)	249,776	

It appears that wool sold through the United Wool Growers will net the grower slightly above 52 cents. No report has been received for the Tazewell pool which usually sells in the neighborhood of 65,000 lbs. The state wool clip is estimated at 16,200,000 lbs.

Lamb Marketing

Most of the Virginia lamb crop is sold through auction markets but a few cooperative pools continue to operate.

Lambs Marketed Cooperatively

<u>County</u>	<u>No. Head</u>
Russell	10,850 Head
Grayson	512 "
Montgomery	447 "
Wayth	780 "
Halifax	520 "
Highland	3,701 "
Total (6)	16,896 head

The total number is practically the same as last year.

State grading of lambs has continued to increase and is of great help in a lamb improvement program. During the fiscal year of July 1, 1943, to June 30, 1944, 153,378 lambs and 15,402 head of slaughter ewes were graded. Average weight of lambs has increased to 79.3 lbs. per head.

Improvement of Registered Stock

The two state purebred associations sponsored the third annual Eastern Stud Ram Show and Sale at Staunton. This event has done much to encourage improvement in purebred flocks in Virginia.

One member of the department spent considerable time in aiding the show and sale as well as the commercial ram sales. He also helped breeders in the selection of breeding stock and in better management practices.

	<u>Results Eastern Stud Ram Sale</u>		
	<u>No. Sold</u>	<u>Average Price</u>	<u>Total Received</u>
Dorset Yearling Rams	2	\$ 330.00	\$ 660.00
Dorset Ram Lambs	2	177.50	355.00
Dorset Ewes	6	169.16	1,015.00
	<u>10</u>	<u>\$ 203.00</u>	<u>\$2,030.00</u>

Results Eastern Stud Ram Sale (cont'd)

<u>Kind</u>	<u>No. Sold</u>	<u>Average Price</u>	<u>Total Received</u>
Shropshire Yearling Rams	<u>4</u>	\$ 127.50	\$ 510.00
Shropshire Yearling Ewes	<u>5</u>	85.00	425.00
	<u>9</u>	<u>\$ 103.88</u>	<u>\$ 935.00</u>
Southdown Yearling Rams	<u>11</u>	\$ 97.72	\$ 1,075.00
Southdown Yearling Ewes	<u>13</u>	76.53	995.00
	<u>24</u>	<u>\$ 86.25</u>	<u>\$ 2,070.00</u>
Hampshire Yearling Rams	<u>13</u>	\$ 188.07	\$ 2,445.00
Hampshire Ram Lambs	<u>6</u>	258.33	1,550.00
Hampshire Ewes	<u>23</u>	123.90	2,850.00
	<u>42</u>	<u>\$ 162.97</u>	<u>\$ 6,845.00</u>
Total	85 Head	\$ 139.76	\$ 11,880.00

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Swine Program

The 1943 pig crop (spring and fall combined) exceeded 1,500,000 head as compared to a pre-war average of 890,000 head. As a result, pig prices during the fall of 1943 and through much of 1944 were at ridiculously low levels and the production of market hogs became unprofitable where much of the feed had to be bought. The problem became one of wise adjustment.

The following suggestions were made to hog producers for 1944 and the program was largely built around them:

The Virginia production goal calls for 198,000 sows farrowing in 1944, 102,000 in the spring, and 96,000 in the fall. Although this is a reduction of approximately 20% under the estimated number of sows farrowing in 1943, it will be much more difficult to reach than any previous goal established. Factors tending to reduce production are the short grain crop in Virginia, the difficulty in securing feed, the less favorable relationship between feed costs and hog prices, the extremely low pig prices prevailing during the fall, and the announced lower support price after September 30, 1944.

The following suggestions may be helpful in making needed adjustments:

1. Dispose of excess breeding stock as soon as animals reach a fair degree of finish. Sell market hogs at lighter weights. Feed saved in this manner will help maintain sows for farrowing in 1944.
2. Adjust hog production more nearly to normal feed production on the farm, or to what is available at a favorable price. Produce more feed for hogs in 1944.
3. Do not base feeder pig operations in 1944 on the extreme prices prevailing in 1943. Pig prices are expected to improve over those of the fall but are not likely to reach the high levels of the last spring. Market hogs should be produced only where a profit appears likely with hogs selling between the support and ceiling prices.
4. Use pasture to reduce the amount of grain and protein supplement needed. Grazing crops are particularly important for brood sows and young pigs. It may be advisable to limit grain to a greater extent than normal when good pastures are available.

5. Raise more pigs per litter. The average number of pigs raised per litter in the spring crop has declined from 6.4 in 1941 to 6.0 in 1943. More pigs per litter will tend to offset any failure to meet the 1944 goal in sows farrowing. Breeding good producing sows, practicing better feeding and management, and using pig brooders will aid in saving more pigs per litter.
6. Avoid waste. Rations should be balanced as well as possible for all hogs by supplementing grains with feeds containing adequate amounts of protein, minerals, and vitamins. Wasteful feeding practices and loss of feed by spoilage and rodents should be eliminated.
7. Provide adequate equipment. Good housing often prevents losses.
8. Produce sufficient pork for home use, however, where all feed must be purchased, such production is not encouraged.
9. Make full use of waste-products of the farm as well as of garbage, distillery slop, etc., in pork production.
10. Control parasites and diseases both through sanitation and treatment.

Information in regard to the above reached producers through goals meetings held in every county of the state during January, through special livestock meetings or schools held in 10 counties, by news articles, the radio, professional workers, and the Neighborhood Leaders' system. In August of 1944, another series of county meetings was held to reduce herds too much as it appeared that liquidation might easily go too far by the spring of 1945.

Other swine work which fitted into the wartime picture was as follows:

Demonstrations:

Demonstrations were used to carry good practices to the attention of producers.

Feeding demonstrations, using three or more pigs (handled largely through 4-H Club work): 73.

Construction of individual farrowing houses (4-H Club work): 150.

Fat Hog Shows and Sales:

Fat hog shows were held at Orange, Front Royal, Salem, and Abingdon.

Results Fat Hog Shows and Sales

	No. Pigs	Total Weight	Average Weight	Total Receipts	Average Price
Open Class	41	9,510	232	\$ 1,343.14	\$ 14.11
4-H Club	248	55,098	222	8,265.79	14.82
Total	289	64,608	223	\$ 9,607.53	\$ 14.81

In 1943, 296 head were sold at an average weight of 213 lbs. with total receipts amounting to \$9,586.69.

Activities Virginia Purebred Swine Breeders Association:

Improvement in breeding and the distribution of breeding stock is largely carried on through the activities of the Virginia Purebred Swine Breeders' Association, with a member of the department acting as secretary, swine breeders are advised and helped in the production of a medium type hog and strains that are productive. A Virginia breeder had the leading herd in America in the Production Registry herd contest in 1943 and the first production Registry boar of the Duroc breed. The annual meeting and six sales were the principal actions of the above organization. Visits to breeders numbered 79.

Results Purebred Hog Sales

Place	Bred Sows		Open Gilts		Boars		Total Amount
	No.	Average	No.	Average	No.	Average	
Staunton (winter)	11	\$ 67.13	14	\$ 27.17	22	\$ 24.85	\$ 1,655.00
Winchester (winter)	10	72.35	13	18.88	12	24.41	1,262.00
Suffolk (winter)	14	64.57	19	23.21	41	31.25	1,281.50
Winchester (summer)	12	48.00	10	23.30	13	28.27	1,176.50
Staunton (summer)	19	48.00	15	26.00	14	25.14	1,654.00
Suffolk (summer)	11	58.76	6	21.50	31	25.94	1,917.00
Total (6)	77	\$ 58.44	77	\$ 23.26	146	\$ 27.27	\$ 8,957.00

Price By Breeds

Breed	Bred Sows		Open Gilts		Boars	
	No.	Price	No.	Price	No.	Price
Berkshire	2	\$ 58.00	15	\$ 22.36	14	\$ 22.03
Duroc Jersey	38	65.45	40	23.93	85	28.46
Hampshire	9	49.39	4	19.75	18	23.14
O.I.C.	-	-	3	25.00	1	15.00
Poland China	29	52.60	11	23.63	19	31.79
Spotted Poland-China	-	-	4	30.50	10	21.90

Average Prices at Similar:

	1940	1941	1942	1943
Bred Sows	\$35.75	\$ 53.75	\$69.90	\$86.45
Open Gilts	12.52	20.91	28.80	36.13
Boars	14.77	22.93	35.98	45.92

The Virginia State Hampshire Breeders held their first sale in August.
In connection with it a type conference and a judging contest were held.

Sale Results:

34 Brood Sows	- average -	\$66.91
3 Boars	- " -	110.63

4-H Club Livestock Program

The 4-H livestock program was expanded to some extent in 1944. The state short course was held and four days instruction was given to 63 club members. Judging contests were again held at various points in the state but in connection with purebred sales. There were 4 such contests held with 130 boys taking part. Seven fat stock shows were held and breeding pigs were assembled for judging in seven counties, but aside from the above activities it was largely a matter of trying to get good project work done on the farms. The specialists' part consisted of preparing material, assisting agents in supervision, selecting animals, and in judging or scoring projects.

4-H Beef Projects

Two types of projects were participated in by 4-H Club members in beef club work.

Baby Beef:

Two hundred and twenty-two members completed their work in this type of project with 279 animals being grown out for slaughter. This was an increase of 64 members and 69 animals over 1943. This revival of interest paid off in increased profits to the amount of \$13,925.70 against \$7,977.52 in the previous year. The higher quality in project work was shown by the fact that while the number of animals fed increased only 30%, the total profit increased more than 74%. This greater net per unit was brought about by (1) selection of better type animals, (2) improved feeding practices, and (3) proper management.

Two baby beef shows were held, one at Richmond sponsored by the Virginia Beef Cattle Producers Association, and one at Salem sponsored by Heshoff Packing Company. Thirty-five animals from 11 counties were shown and sold at Richmond, while 58 from 8 counties were shown and sold at Salem. The Richmond exhibitors received an average of \$23.66 per cwt. for their beeves with the top of \$56.00 going to Richard Ellis IV of Buckingham for his grand champion Angus steer. The Salem exhibitors received an average of \$24.70 per cwt. with the top of \$53.50 going to Davis Miller of Pulaski county for his Angus steer. Interest seems to

be rising in the baby beef shows and an increased number of calves will be shown in the spring of 1945.

No. Counties	Members		No. Animals	Income	Profit	
	Enrolled	Completing			Total	Per Member
47	305	222	275	\$37,091.54	\$13,925.70	\$42.72

Breeding:

Eight counties participated in beef breeding projects with 21 club members owning and managing 30 breeding animals. The stepped-up interest in this type of project can best be seen by the increase over previous years. Many of the animals kept are purebred and the members are laying the foundation for a good type of herd.

In one particular county in the state, a club member who exhibited two calves at the Neuhoff Fat Calf Show in the spring of 1944 was disappointed with the way his calves placed in the ring. Neither he nor his parents realized the value of quality animals until they saw the show. When they returned home from Salem, they decided to dispose of the grade cattle and purchase either higher grades or purebreds. Consequently, as a result of the 4-H calf show, another farmer began breeding purebred cattle. Incidentally the 4-H member is now the proud owner of four registered females that will drop calves in 1945.

Beef Heifers:

No. Counties	Members		No. Animals	Income	Profit	
	Enrolled	Completing			Total	Per Member
8	30	21	30	\$3,296.20	\$948.50	\$45.16

Sheep Projects:

Interest in sheep breeding projects was greater in 1944 than the previous year with 60 members owning and caring for 279 sheep against 57 members and 60 sheep in 1943. The project generally consists of five or more ewes and 1 buck with the member growing out his lambs for market or replacement. The 60 members in 1944 had a total profit of \$1,538.36 or \$26.05 each.

No. Counties	Members		No. Animals	Income	Profit	
	Enrolled	Completing			Total	Per Member
27	90	60	279	\$4,091.33	\$1,538.36	\$26.05

I-H Club Pig Projects

Enrollment in pig club projects totaled 2,990 members. Specialists' time has been devoted more toward improving project work rather than increasing membership. Such help consisted of preparation of material, visits to club members, judging shows, scoring projects, and selecting pigs - particularly boars.

Breeding Projects:

The breeding pig projects sponsored by Sears Roebuck and Company have been very effective. They were established in 56 counties in Virginia during the period 1941-44. Four counties, however, have discontinued the project.

The original pigs, four to ten per county, were in most cases selected by the specialist and were paid for by the above firm. The club member is required to return a satisfactory sow pig from the first litter of his sow or secure one from one of the other sows so that the project can be continued. Sears Roebuck furnishes a boar for each county each year and prizes consisting of a purebred halifer for the winner and 100 baby chicks and 50 baby chicks as second and third prizes. Projects are usually started in one community and each succeeding year, the "pay" pigs are moved into another community.

The projects have been exceptionally well carried out. Good lots, balanced rations - including protein and mineral supplements, and proper housing are required, and the result is that the projects are good demonstrations in good breeding and in good feeding and management practices. Another result is the wide distribution of good breeding stock. An example of the latter is the project in Appomattox county where 40 pigs from project sows were registered in 1944. Another county reported 23 sows were in production in the third year of operation of the project.

Examples of the quality of pigs produced from such projects are that a club boy sold a boar pig in the 1943 Suffolk sale for \$67.00. Another club boy topped the sale of 43 boars at the same place in 1944. Then the champion litter at the Salem fat hog show which weighed 2,700 pounds at 191 days of age was out of one

of the original sows placed in Montgomery county.

Proceeds from sow and litter projects, which are probably 80% Sears projects, totaled \$21,890.91 in 1942 with profits of \$11,080.87, and in 1943 they were \$36,715.22 with profits of \$14,876.39. The figures for 1944 are given elsewhere.

Specialists' help consisted of selecting boars for 31 counties, selecting 30 sow pigs for the establishment of new projects, judging seven pig shows, judging projects on farms in 19 other counties, 232 visits to club members, and preparation of circular E-380.

Observation and reports from district agents reveal that the projects have been carried out better in 1944 than in 1943. More good boars were placed this year than in any previous year and therefore, the situation looks bright for the continuation of the project. The main difficulty will be time for supervision by county and club agents.

Fattening projects were carried out to about the same extent in 1944 as in 1943. Feed cost, of course, was high but pig valuation at the beginning of the year was very low. Results of the four fat hog shows held are given under "Swine".

Summary Pig Club Work in 1944

Counties Reporting	Total Enrollment	Completions	No. Animals	Total Income	Profit Without Prices
Breeding Hogs 57	477	407	957	\$22,986.99	\$ 7,233.89
Sow Litter 53	474	347	2,265	32,980.86	11,262.98
Fat Pig 82	2,039	1,165	2,030	63,344.77	17,233.74
Total - 1944	2,990	1,919	5,252	119,312.62	35,730.61
Total - 1943	3,171	1,938	5,926	138,476.81	47,003.49
Total - 1942	2,416	1,528	4,427	97,235.14	40,568.23

Completions were only slightly below the record figure of 1943. Prizes valued at \$3,978.45 were won on the above projects.

Publicity

Publicity during the year was largely directed to problems directly relating to the war effort such as meeting goals, livestock adjustment, efficient feeding, control of diseases and parasites, and the production of more feed for livestock.

Newspaper and Magazine Articles Written

	<u>Herring</u>	<u>Swaffar</u>	<u>Litton</u>	<u>Dalton</u>
County Papers	8	5	-	-
4-H Club Letter	14	5	4	2
Extension Division News	11	3	1	1
Agricultural Magazines	4	20	19	-
Neighborhood Leader's Digest	12	-	-	-
Total	49	33	24	3

Radio Talks Prepared

Herring -	5
Swaffar -	4
Litton -	5
Dalton -	2
Total	16

Bulletins and Circulars Prepared

<u>Title</u>	<u>Author</u>
4-H Project Manual "Breeding Pig"	Herring
4-H Project Manual "Baby Beef"	Swaffar
Meeting 1945 Goals (in part)	Members of Department
Pork in 1944 - circular	Herring
Livestock and Feed - circular	Members of Department

General Summary

	<u>Herring</u>	<u>Smaffer</u>	<u>Latton</u>	<u>Dalton</u>
Travel (miles)	25,453	33,238	8,701	2,456
Days in Field	164	204½	55	19½
Days in office	127	104½	18	14½
Total days at work	291	309	73	34
County agents visited	137	137	68	15
Breeders visited	79	251	76	16
Club members visited	231	114	10	55
Other visits	35	95	-	3
Meetings attended	84	62	10	8
Attendance	3,425	3,900	249	1,016
Demonstrations	1	22	-	-
Attendance	30	3,045	-	-
Personal letters	753	1,412	372	24
Circular letters	9	27	4	-
Articles written	49	33	24	2
Radio talks	5	4	5	2
Livestock shows	13	6	3	2
Auction purebred sales	8	16	12	4
Auction commercial sales	4	18	2	1
Counties worked in	62	52	49	17

Signed J. C. Herring
Extension Animal Husbandman