THE ORGANIZATION, OPERATION AND EFFECTIVENESS OF OHIO LAMB POOLS

THESIS FOR THE DEGREE OF
MASTER OF SCIENCE

MICHIGAN STATE UNIVERSITY
RALPH HOWARD GRIMSHAW
1959

THE ORGANIZATION, OPERATION AND EFFECTIVENESS OF OHIO LAMB POOLS

by

RALPH HOWARD GRIMSHAW

AN ABSTRACT

Submitted to the College of Agriculture of
Michigan State University of Agriculture and
Applied Science in partial fulfillment of
the requirements for the degree of

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Department of Animal Husbandry

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ABSTRACT

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Ralph H. Grimshaw

Records from five Ohio lamb pool programs for the period, 1954-1958, were used in this study. Some comparisons were made with the first five year operating period for each pool area. Lamb pool reports and the first hand knowledge of the author in each of the pool programs were the main sources of the data.

Interested sheepmen of a county or area have been responsible for the improvement in production practices and marketing methods. A sheep improvement committee plan of organization was used in the lamb pool programs and group action was the dominant force behind these operations.

Lamb pools, to some people, have been simply another method of marketing lambs. Many marketing agencies have not considered the lamb pool system because of the expense involved when compared to auction selling of ungraded lambs or direct buying.

The pools have been effective in securing a larger financial return per lamb and have provided information on the value of recommended production practices.

The pool program activities have developed continuing leadership through the local committees and such leaders were found representing the livestock industry in state improvement associations. County

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Extension Agents have noted an increased interest in the development of their programs through the planning and preparation of teaching materials for their use.

Production and marketing improvement were shown to be tied together. The pool programs have contributed to the quality of lambs for effective marketing. Timely "topping-out" of lambs has been encouraged. Pool programs have insured the use of experienced lamb graders and encouraged marketing more lambs during seasonal periods of higher prices. The pool method has effectively encouraged the marketing of fewer feeders and other low grade lambs.

The closed pool method of pricing does not allow marketing agencies to locate new markets to increase buying competition. Local pool committees should consider the auction method of pricing lambs.

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candidate for the degree of

Master of Science

Final Examination:

Dissertation: The Organization, Operation and Effectiveness of Ohio Lamb Pools.

Outline of Studies

Major Subjects: Animal Husbandry
Minor Subjects: Agricultural Economics

Biographical Items

Born, July 4, 1908, Lucasville, Ohio

Undergraduate Studies, Ohio State University, 1927-1931

Graduate Studies, Ohio State University, Summer terms of 1934, 1935, 1936, and 1937.

Michigan State University, Fall quarter, 1955 and Spring quarter, 1957.

Experience: Vocational Agriculture Instructor, Ohio, 1931-1943
Fieldman, market manager, and lamb grader for Cincinnati Livestock Producers Association, July 1943 - February, 1947.
County Extension Agent, Agriculture, Wilmington, (Clinton County) Ohio, 1947-1951.
Animal Science Extension Specialist, Ohio State University, 1952 - present time.

Member of American Society of Animal Production, Gamma Sigma Delta, and Epsilan Sigma Phi.

ACKNOWLEDGEMENTS

The author wishes to express his appreciation to Dr. Harold A. Henneman for his guidance of this project and to the advisory committee for their help and friendship.

Grateful appreciation is extended to Dr. George R. Johnson, Chairman of the Department of Animal Science, Ohio State University, for his continual encouragement and personal interest during the course of this study.

I dedicate this work to the late Lawrence A. Kauffman, former Chairman of the Ohio State University Animal Science Department, and to C. W. Hammons, Extension Economist in Farm Marketing, Ohio State University; the former for his devotion and aid to the sheep industry, the latter for his help as a co-worker in setting up the Ohio lamb pools.

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I. INTRODUCTION

Ohio's lamb pool program was started by Clinton County sheepmen in 1933. The first year's volume of pooled lambs totaled 983 head. Ohio sheepmen for the year 1954-1955 consigned 117,729 head through twenty pools.

Interested sheepmen of a county or area have improved production practices and marketing methods through interest generated by County Sheep Improvement Committees elected by flockowners. The Lamb Pool Committee plans the production and marketing of quality lambs on a graded basis. Representatives of several County Improvement Committees have joined in forming an Area Lamb Pool Committee.

A lamb pool has been an action program that started on the farm and ended when lambs were sold to consumers as meat. Activities have included improvement of production and marketing methods, by: (1) the production of more quality lambs with higher carcass value; (2) the use of grade standards that reflected quality and carcass value in grading lambs; and (3) selling graded lambs to packers on a basis that reflected quality and carcass value in prices paid to the producer.

Sheepmen and their committees have taken the responsibility for establishing lamb pools and arranging for marketing services; they have cooperated with the Agricultural Extension Service for the needed educational activities.

Lamb pool programs were designed to help solve production, marketing, and economic situations confronting sheepmen. Some of the major

problems were:

(1) The consumer demand for lambs was limited to certain areas.

(2) The production and marketing of large numbers of low quality lambs at materially lower prices.

(3) The heavy seasonal marketings of Ohio lambs in the fall which competed with heavy seasonal marketings from western ranges during a period of declining prices.

(4) The markets which did not use grade standards which reflected high carcass value in prices paid producers.

(5) The many areas of dense lamb production which were not adjacent to markets using improved methods of assembly and grading for packer procurement.

The over-all lamb marketing problem consisted of: what type, grade, or quality of lambs to produce; how much of each grade and weight to produce or sell; when to sell; where to sell lambs and how to market more effectively.

This investigation involved five Lamb Pool Programs and is in no way a final solution to the problem of lamb production and marketing.

II. OBJECTIVES

1. To serve as a guide to Extension Service workers for evaluating the improvement in production and marketing of lambs in areas of lamb pool activities.

2. To determine some problems and trends in lamb production and marketing in the five market areas served by pools.

3. To provide educational information and facts for the county Sheep Improvement Committees that might suggest the need for a revision of activities.

4. To help County Committees, the Extension Service, and the College of Agriculture to explore possible profit incentives resulting from farmer's participation in a continuing effective action program that combines profitable production techniques with effective marketing procedures.

III. HISTORY OF THE OHIO LAMB POOL PROGRAM

Ohio's lamb pool program was started by Clinton County sheepmen in 1933. The first market year's volume of pooled lambs totaled 983 head.

Possibilities of lamb and wool production prior to 1933 had been overshadowed by the much greater attention given to hog production. Clinton County ranked first among Ohio counties in the production of hogs, according to the United States Census (1935). Their was a popular belief that sheep were not profitable on high priced, productive land. However, a marked upward trend in sheep production was in evidence in the typical corn-hog counties of Southwest Ohio.

Prior to 1932, little effort was expended on the problems and possibilities of lamb and wool production in Clinton County. Flocks were small, averaging less than thirty breeding ewes. Production practices lacked purposeful direction and the selling of lambs and wool was extremely diversified, with little or no attention paid to market demand or grades.

The problems involved were revealed in a farm survey of sixty flocks prior to the inauguration of the County-wide Improvement Program in the Spring of 1932. This survey was undertaken by the County Agent with the endorsement of the county Farm Bureau and officers of both Pomona and subordinate Granges of the county.

Observations at the Cincinnati Terminal Market and information supplied by the largest commission firm revealed that not more than half

of the market lambs from Clinton County possessed sufficient quality to grade as Good and Choice. Since the normal spread between Medium and Choice grades approximated $1.50 to $2.00 per hundred pounds, the loss to flock owners was readily apparent.

The survey revealed that only a meager portion of the market lambs were sired by purebred rams. This lack of breeding required a longer period to get the lambs ready for market, higher production costs and more medium fleshed lambs.

Forty percent of the flocks received no legume hay.

Sixty percent of the flock owners had no systematic plan for controlling either internal or external parasites.

Lambs were generally sold by lot regardless of grade, usually to country buyers. Others consigned their lambs unsorted to the terminal market. Prices received under such methods offered little incentive for flock owners to give increased attention to the management of their flocks.

Facts gleaned from the survey were considered by more than seventy flock owners who met early in the Spring of 1932. After thorough discussion the group agreed to launch a program designed to place their industry on a sound management program. Recognizing that each flock owner working alone would fall short of the goal, especially in the marketing of his products of lamb and wool, a voluntary organization was set up to make detailed plans and set the program in motion. Officers were elected from the group and the sponsoring organization was named The Clinton County Lamb and Fleece Improvement Association.

Two directors were elected each year from each of nine improvement districts in the County. This board determined policies, provided leadership for a continuous educational program and directed the purebred ram campaigns and marketing activities of the association. Regular counsel was maintained with the County Agent, Livestock and Marketing Specialists and Terminal Cooperatives in planning and directing activities.

The campaign was started at a county-wide Sheepmen's Roundup and Field Day held on the County Fairgrounds on April 27, 1932. Spectacular features were provided through a county shearing contest, wool show, carcass cutting and flock management demonstrations. Nearly three hundred flock owners attended the event and learned of plans for future activities. A roast lamb luncheon was served at which many sheepmen consumed, for the first time, the product they had been regularly producing for many years.

Beginning with the first Purebred Ram Campaign in 1932, forty-four registered rams were purchased. Flock owners purchased four hundred registered mutton rams during the first five year period. Of these, 293 were Shropshires; 58 Southdowns; 15 Hampshires; 5 Dorsets and one Corriedale.

Duplicate copies of registration certificates for all rams owned by Association members were maintained in the office of the County Agent. Information as to the age and breeding of rams available for exchange or sale was readily supplied to all interested flock owners and many rams were exchanged each year.

A purchasing committee from the Association Board of Directors and the County Agent selected the rams from purebred flocks throughout the

state, and adjoining states, during June and July.

Selections were made on a high standard, and a cash option was taken on the entire lot selected. Flock owners made advance deposits of $5.00 each on the number of rams they desired to purchase. The balance was paid at the time the rams were delivered to the county. Usually a special date was set for distribution and was known as "Ram Distribution Day". Flock owners drew by lot for their rams, following the selection by the committee. Values were placed on individual rams according to quality. All rams were purchased with the breeder's guarantee that he would either refund the money or supply another ram in event a ram proved a non-breeder.

Only yearling and two-year old rams were purchased. No charges were made for this committee service. Such a program not only proved profitable to the purchaser, but also offered a good outlet at reasonable prices for purebred breeders.

By 1937 this association, incorporated under the cooperative laws of Ohio, embodied a membership of 326 flock owners, all of whom were using registered rams of recognized mutton breeds adapted to Clinton County conditions. There were no dues, and membership was terminated when a flock owner ceased to use a purebred ram.

Simultaneous with the purebred ram campaigns, purchases of more than one hundred registered yearling ewes were made by 1937 in the establishment of eight purebred flocks.

Eleven dipping rings, of ten members each, were organized in 1935 within the Improvement Association to meet the external parasite problem. Portable dipping equipment using metal cages for retaining the sheep were

purchased by each ring. Signed reports, received by the County Agent, showed that these members dipped a total of 7330 sheep and lambs in that year alone at a cost of less than five cents per head. Dipping supplies were purchased cooperatively by association members.

Prior to the inception of the improvement program, only a few Clinton County lambs were sold on a graded basis and a still fewer number were graded in the presence of the producer. The entire season's production of market lambs was sold at one time, regardless of grade or finish, the grower taking the price offered. Expense of transporting small lots of lambs to a terminal market reduced his opportunity and interest in sorting his lambs. Small lots, offered for sale, ungraded, by flock owners working independently and without knowledge of lamb grades, placed the Clinton County lamb crop in "weak hands" from a market standpoint.

Beginning in the summer of 1933, with their first crop of lambs sired by purebred rams, members of the Improvement Association launched a program for grading their lambs within the county and pooling shipments to reduce transportation and selling costs.

The Board of Directors engaged the services of the Producers Cooperative Commission Association, located at the Cincinnati Union Stockyards, who sent their field representative to Clinton County on grading days.

Assistance was also rendered individual members in sorting their lambs at the farm in advance of the grading days. This was done to lend further encouragement to the practice of "topping-out" the lamb crop and avoiding marketing of unfinished lambs.

Lamb grading days were held at the Baltimore and Ohio Railroad Yards in Wilmington at monthly intervals from June until December and the lambs

moved to market by rail.

Five grades were established and all lambs were marked as to their respective grade before shipment. They were designated as Double Blue, Single Blue, Link Blue, Red dot, and Yellow dot. Descriptions of the grades follows:

DOUBLE BLUE (premium lambs) marked with two blue rings in the center of the back. This grade represented the cream of the crop and included only lambs of thick, low-set conformation capable of producing the highest quality cuts. Lambs for this grade weighed from seventy-five to eighty-five pounds and dressed out from fifty-two to fifty-five percent.

SINGLE BLUE (Good and Choice, sometimes referred to as "tops") were marked with a single blue ring in the center of the back. The bulk of the lambs marketed by the association were of this grade. This grade was comparable to the good and choice lambs at the Cincinnati Terminal Market. Weights ranged from seventy to eighty-five pounds and dressing percentages ranged from fifty to fifty-two. Condition was the determining factor in the Single Blue grade.

LINK BLUE (heavy lambs) were marked with a blue paint brand. This grade represented lambs carrying sufficient finish, but too large to furnish the cuts the trade demanded and were penalized accordingly. Lambs in this grade usually exceeded an average weight of ninety pounds at the market.

RED DOT (medium lambs) were marked with a single red ring. Lambs in this grade lacked the finish required for the top grades. The smoother lambs in the Red Dot grade would usually become good and choice lambs if fed longer following rigid treatment to eliminate internal parasites.

YELLOW DOT (common lambs) were marked with a yellow ring. This grade caught the "shelly" light lambs usually weighing less than sixty-five pounds and so lacking in thrift and condition as to render them undesirable for slaughter or further feeding.

During the first four years, 1746 of the lambs, or an average of 13.7 percent graded premium (Double Blue) and 8454 or an average of 66.4 percent graded good and choice (Single Blue).

There were 241 farms eligible to market lambs through the association in 1936. Of this number 214 or 88 percent of the eligible farms consigned part or all of their lambs.

First twelve years accomplishments of the Clinton County pool program.

It was difficult to measure accomplishments in dollars and cents. However, a rough estimate might be made by comparing the prices paid for pool lambs to the prices paid on the Cincinnati market on the same marketing days. The average price received for pool lambs over the twelve years (1933-1944) was $11.84 a hundredweight, as compared with $10.28 for Cincinnati market lambs. This average premium of $1.56 per hundred pounds for 70,341 lambs amounted to $81,165.25 additional income to Clinton County producers. The premium for pool lambs ranged from forty-two cents in 1934 to $2.40 per hundred pounds in 1943.

Credit for this record goes largely to forty-four farmers spurred by an aggressive county agent, Walter L. Bluck of Wilmington, Ohio, who, in 1932, influenced them to head their flocks with registered rams. Lambs sired by these rams brought an average premium of seventy-six cents a hundredweight; and the neighbors heard about it. Bluck bombarded the county with facts and figures by mail, in newspapers, at leg-o-lamb

banquet programs, in discussional parleys, field days, contests, demonstrations and tours.

These forty-four farmers comprised the original improvement association and became the spearhead of Bluck's educational attack. By 1944 owners of 473 flocks belonged to the Association. The only requirement was that a member must use a purebred ram and pay six cents a head for "trade marking" (grading) and costs of marketing pool lambs which had formerly averaged forty cents a head for such services.

During the twelve years 78.8 percent of the pool lambs graded in the top two classes. Prior to 1933 less than half of Clinton county's lambs graded either good or choice.

Since 1932 association flock owners have bought 1,237 registered rams. At first most of them came from outside; but by 1944 the demand had been met largely within the county. In 1944, for the first time, the local supply exceeded local demand and thirty head were sold into Kentucky.

Thus a county group had money by collectively following a program of constructive breeding, efficient management and merchandising of a superior product. With justification, the Clinton County Lamb and Fleece Improvement Association claimed it "led the nation in market lamb improvement".

The total lamb pool volume of Clinton County for the past twenty-six years has been 171,292 head of lambs as shown in Table I.

What areas have been served by Ohio lamb pools? Lamb pools have made it possible to assemble quality lambs in sufficient volume for effective marketing. During the year, 1955-1956, the twenty-two pools listed in

Table 2 were the maximum number operating in Ohio.

Up until June, 1955, not one market lamb pool had failed. However, the Adams County Pool (small volume), which began operations in 1941, merged with the Hillsboro Pool in 1948. This action gave these men a choice of more pool days, the use of adequate market and transportation facilities, and an improved grading service.

TABLE I

WILMINGTON LAMB POOL VOLUME CONSIGNED
FROM CLINTON COUNTY AREA
FOR TWENTY-SIX YEARS--1933-1958

Year	Volume	Year	Volume
1933	983	1946	6820
1934	2082	1947	5481
1935	4089	1948	5929
1936	5583	1949	5057
1937	4783	1950	4841
1938	6499	1951	5346
1939	6811	1952	6804
1940	7353	1953	8440
1941	8123	1954	10,741
1942	9108	1955	11,105
1943	7587	1956	10,747
1944	8033	1957	7460
1945	7180	1958	3027

LONDON LAMB POOL VOLUME CONSIGNED FROM
MADISON COUNTY AREA
FOR EIGHTEEN YEARS--1941-1958

Year	Volume	Year	Volume
1941	2,978	1950	5,987
1942	6,531	1951	6,806
1943	7,000	1952	9,085
1944	11,741	1953	10,312
1945	13,117	1954	9,445
1946	10,632	1955	9,296
1947	9,090	1956	10,082
1948	9,140	1957	8,640
1949	7,516	1958	8,681

TABLE 2

LOCATION OF OHIO'S TWENTY-TWO POOLS
1955

Town	County	Year Organized
Wilmington	Clinton	1933
Eaton	Preable	1936
Hillsboro	Highland	1937
Findlay	Hancock	1938
McGonigle and) Hughes Station)	Butler	1939
Lebanon	Warren	1939
Washington C.H.	Fayette	1941
London	Madison	1941
Greenville	Darke	1941
S. Charleston	Clark	1944
Marysville	Union	1944
Bellefontaine	Logan	1945
Ashley	Delaware	1945
Lancaster	Fairfield	1945
Greenwich	Huron	1947
Mt.Vernon	Knox	1949
Coshocton	Coshocton	1953
Bucyrus	Crawford	1954
Upper Sandusky	Wyandotte	1954
Wapakoneta	Auglaize	1954
Hicksville	Defiance	1955
McConnelsville	Morgan	1955

Organization of Ohio Lamb Pool Program

Committee organization. Participating parties in the County Improvement Committees have been:

(1) Sheepmen: At least two-thirds of the committee have been flock owners who market slaughter lambs in cooperation with their neighbors.

(2) Educational Agencies: County Agents, State Extension Service specialists of Animal Science and Agricultural Economics, Vocational Agricultural Teachers, press, and radio.

(3) Marketing Agencies: Committee selections included the Producers Livestock Cooperative Associations and the Ohio Wool Growers Cooperative Association.

(4) Packers.

(5) Public carriers, bankers, sheep dippers, shearers, consumers, the press, and others interested in the sheep industry have been invited to serve on the committee.

Responsibilities of the Committee. The responsibilities of the Committees have been:

(1) To organize and elect officers annually.

(2) To determine and carry out an educational program and plan of work in cooperation with the Agricultural Extension Department.

(3) To maintain close cooperation with the sponsoring marketing agency. The committee plan of organization has been used with the following sub-committees: (a) Ram and ewe procurement, (b) Parasite control, (c) Junior Sheep Program (4-H and FFA), (d) Pool operations, and (e) Other committees were often used.

The County Sheep Improvement Committees have cooperated in a state-wide industry program by becoming a member of, and naming a director-at-large to the Ohio Sheep Improvement Association.

Relationship between county or area lamb pool committees, Marketing Agency and Agricultural Extension Service.

(1) Since sheep and wool production and marketing improvement were involved, County Extension Agents, Animal Science Specialists, and Marketing Extension Economists cooperated with County and Sheep Improvement Committees in planning annual and long-time sheep and wool improvement programs.

(2) Effective group action included: (a) joint consideration of needed improvement in production practices and (b) needed improvement in marketing methods.

(3) The Extension Service cooperated in:

a. The analysis of production problems and situations.

b. The analysis of lamb pool records and marketing problems.

c. Providing sheepmen and market agencies with data and information obtained from market studies.

d. Providing timely information through all media, conducting meetings, and field demonstrations.

(4) An analysis of sheep population and factors affecting lamb marketing before a new lamb pool was formed. Requests for an analysis of a new area originated through County Extension Agents and of an existing pool through County Extension Agents or a market agency.

Responsibilities of the local producers livestock marketing association.

(1) To grade, identify, weigh, yard, sell, and load lambs and make payment to consignors.

(2) To provide on-the-farm service to assist with production and marketing problems. Schedule regular days to fill requests for assistance in "topping-out" lambs for market during the pool marketing season.

(3) To work with committees and the Extension Service in an advisory capacity in all phases of the production and marketing improvement program.

(4) To furnish information for publicity immediately following each pool.

(5) To make regular reports following each pool to the County Extension Agents and the Eastern Order Buying Company.

(6) To pay the committee treasurer the agreed sum per head deducted from the consignor's returns for financing the Sheep Improvement Committee's activities.

Responsibilities of Producers Livestock Marketing Association, and its subsidiary, the Eastern Order Buying Company.

(1) To coordinate lamb pool schedules.

(2) To develop and maintain uniform standards of grading and other services.

(3) To effect marketing agreements with slaughterers for dependable and consistent sale on the respective merits of all lambs which were consigned to the regularly scheduled pools.

(4) To assemble available information from slaughterers as to performance of lambs at given pools. This has been useful in achieving

uniformity of grades and in guiding the improvement program.

(5) To assemble two copies of each individual lamb pool report, one to be forwarded to the Extension Marketing Specialist, Ohio State University.

The Characteristics of Lamb Marketing

Uneven distribution of lamb and mutton. Lamb and mutton have been more unevenly distributed than most agricultural commodities. Doty (1956) reported that during periods of short supply, lamb disappeared from many retail stores for weeks at a time. To avoid such gaps, producers have been encouraged to adjust their breeding and feeding schedules to assure a more uniform supply. Doty (1956) reported that an in-and-out supply of lamb has tended to discourage both the packers and retailers. Lamb and mutton distributed to New York and California was more than double the distribution to any other state in 1954. New York received 23.9 percent of the United States total and California, 20.9 percent. The third ranking state was Massachusetts with 8.3 percent of the total. Other states of some importance in the quantity of lamb and mutton distributed to them in 1954, each receiving four to six percent of the lamb and mutton distributed throughout the United States, were: Pennsylvania, Illinois, New Jersey, and Michigan.

He further reported that certain states accounted for almost the entire quantity of lamb and mutton distributed to the regions for consumption in 1954. California took ninety-one percent of the lamb and mutton distributed to the Pacific region. Massachusetts was by far the greatest receiver of lamb and mutton in New England, taking seventy percent of the total going to that region. Illinois and Michigan took seventy-two percent of the total lamb and mutton available for consumption in the East North Central region. In only one region did all of the states in the region have available for consumption a fairly high

amount of lamb and mutton, and that was the Middle Atlantic region composed of New York, New Jersey, and Pennsylvania.

Doty (1958) reported that lamb was available in only thirty-nine percent of the retail stores handling fresh red meats across the nation in 1955.

Lamb consumption. Although the average lamb and mutton consumption nationally is 4.5 pounds per person annually, there are wide variations among the states. Doty (1956) reported that the people of Massachusetts and California consumed 12.4 pounds annually, Ohio 2.2, Texas 1.4, while in Mississippi and Georgia, it was only 0.2 to 0.3 pound. Thirty percent of the population ate seventy-percent of the lamb produced and many people have never tasted lamb.

Lamb carcasses. Sotola (1958) reported that carcasses from lambs weighing over 105 pounds have limited outlets. Heavy lamb carcasses which made up to twenty and twenty-five percent of the total supply, were fairly well absorbed by the hotel and restaurant trade. Many of the Western hotels have raised the limit on lamb carcasses from fifty to sixty-five pounds. Formerly the hotel trade considered the heavier carcasses to be produced from yearling sheep. There were four to five chops to a pound from loins of lamb carcasses weighing forty to fifty-five pounds, but only three if the weight was sixty to seventy pounds. Killing lambs in packing plants has been different from other red meats because more labor per pound has entered into the processing.

Levine et. al. (1956) reported that the retailers made the best use of lamb carcasses that were under fifty pounds in weight.

Ohio sheepmen have been encouraged to "top-out" lambs and market them with timing being important. Many times lambs which were not "topped-out" have dropped back in grade and have meant the difference between profit and loss for the feeders. The Agricultural Marketing Service (1959) reported that lambs marketed during the past five years have been heavier. This has come about because of earlier lambing, better management of the ewes, and the lambs fattening more quickly on better rations and pasture.

The Agricultural Marketing Service (1957) shows that there has been a wide price gap between lamb chops, leg-of-lamb, and the less desirable lamb cuts. Levine et. al. (1956) found that most consumers desired chops or leg-of-lamb.

Doty (1958) reported that, to compensate for the slow movement of the less desirable cuts, those more in demand have been priced upwards.

The Shifts in volume of regional slaughter of lamb. The average number and percentage of sheep and lambs slaughtered under Federal inspection in the United States has changed by periods in the various specific regions, Table 3.

Slaughter in the North Atlantic region has declined 1,270,000 head, or 33.7 percent, while the Pacific region gained 2,039,000 head or 211.5 percent for the period 1936-1940 to 1951-1955. The North Central region has similarly declined 2,601,000 head, or 64.2 percent for the period 1941-1945 to 1951-1955.

The 1958 slaughter indicated a further decline in the North Central and the North Atlantic region.

The 1958 Federally inspected slaughter in Ohio totaled 225,000 head of lambs, while estimated marketings have been about three times this number, The Agricultural Marketing Service (1959).

Shifts in volume of regional slaughter have influenced the size and character of Ohio's market outlets for sheep and lambs.

Significance of Kosher meat customs and Jewish holidays. Ohio sheepmen have been informed many times that Jewish holidays have an influence on the Ohio lamb pool markets. Many of the sheepmen who have heard this remark assumed that the Jewish people were forbidden to eat meat on these holidays. Swift and Company (1955), Union of Orthodox Jewish Congregation (1956) and Armour's (1953) point out that the abstinence from eating meat, because of a religious requirement had a minor influence on the lamb market. The main reason was that no slaughtering was done on these holidays. Kosher slaughtering is not performed on Saturdays.

Swift and Company (1955) have shown that forty days have been set aside each year, and published as Jewish holidays, for the years 1954 to 1960, inclusive. No work was permitted on thirteen of these days and no lambs were slaughtered for the kosher trade. Each year these dates were taken into consideration when setting up lamb pool market dates in Ohio.

Kosher meats come from packing plants where the animals are slaughtered and meats prepared under the close supervision of the rabbi or some representative of the Rabbinical Board. The Union of Orthodox Jewish Congregations (1956) reported that the preparation of these meats was a religious rite. A careful physical examination, from a religious health standpoint, was made of all parts of the carcass. Particular attention was given the lungs and stomach. If the lungs did not hold air, or if

any lesions were found any place in the body, the meat of the particular lamb did not meet the requirements of the kosher trade.

Armour's (1953) reported that the Jewish trade has used only those cuts which came from the forequarter of the carcass. Kosher lamb and veal carcasses were cut with one rib on the hind-quarters. Approximately fifty percent of the lamb carcass was in the kosher forequarters.

Swift and Company (1955) and Armours (1953) reported that the meat for the kosher trade must be sold very soon after slaughter. It was common to see retail buyers of kosher lamb meat trading and buying on the killing floor or as the carcasses first entered the coolers. Jewish regulations require that the meat be consumed within seventy-two hours after slaughter. However, this has not been a definite requirement, as this seventy-two hour period can be extended three times by the rabbi or one of his representatives in a religious rite called "beguissing". The Union of Orthodox Jewish Congregation (1956) showed between 2,750,000 and 3,000,000 Jewish people, about fifty percent of whom were Orthodox in New York City.

TABLE 3

AVERAGE NUMBER OF SHEEP AND LAMBS SLAUGHTERED UNDER FEDERAL INSPECTION IN THE UNITED STATES COMPARED BY FIVE YEAR PERIODS, AND AVERAGE NUMBER AND PERCENT SLAUGHTERED IN SPECIFIC REGIONS, 1936-1955* (IN THOUSANDS)

Five Year Periods	Average Slaughter U. S.	Northwest[1]		East[2]		North[3]		Pacific[4]	
		No.	%	No.	%	No.	%	No.	%
1936-1940	17,428	5030	28.8	3983	22.8	3774	21.6	964	5.5
1941-1945	21,242	6569	30.9	4052	19.1	3280	15.4	2216	10.4
1946-1950	15,154	4221	27.8	2091	13.7	2528	16.6	2139	14.1
1951-1955	13,113	3906	30.2	1451	11.1	2504	19.1	2003	15.3
1958 only	12,397	3679		1264		2159		1871	

(1) North Dakota, South Dakota, Minnesota, Iowa, and Nebraska.

(2) Ohio, Indiana, Illinois, Michigan, and Wisconsin.

(3) Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Maryland, Delaware, and the District of Columbia.

(4) Washington, Oregon, and California.

*The Agricultural Marketing Service (1940) and The Agricultural Marketing Service (1957).

Ohio Lamb Pool Method of Marketing

How the closed method of selling lambs operates. Since Clinton County started the first lamb pool program in 1933, the number of buyers for a local pool has been discussed during the annual Sheep Improvement program planning meetings. During the first twelve years of the Clinton County program, the lambs were trucked or railed to the Cincinnati Livestock Terminal Market and sold to the highest bidders.

In 1936, Swift and Company organized an Eastern Buying Department in Columbus, Ohio. Since 1942, the majority of the Ohio lamb pools have sold their lambs to Swift and Company as a "closed-pool". Each year the pool committee would select a packer, who agreed to purchase all of the lambs during the marketing year. Armour and Company also became interested in purchasing the pool lambs, as a result of purchasing many of the Clinton County lambs at Cincinnati.

Two other order buying companies were set up in Ohio to purchase lambs for both the larger and smaller out-of-state packers and retailers. These two companies were the Teegardin Livestock Company and The Eastern Order Buying Company of the Producers Livestock Association, Columbus, Ohio. Mr. Teegardin was never interested in purchasing pool lambs at a closed pool. When Armour and Company closed their Eastern lamb killing plants in late 1956, this left Ohio lamb pools with only one packer interested in purchasing all of the lambs from a closed pool.

The local marketings and county Sheep Improvement Committees determined the pool schedules for the marketing year. Copies of the year's scheduled pools were provided the order buying departments and

the packing plants. Copies of the schedule were mailed each year to all sheepmen in the pool.

Before buying any lambs for the next week's slaughter, the Plant X order buying company's offices gave an estimate of the coming weeks kill of lambs, by numbers, weights, and grades for each pool scheduled. This estimate was made after contacts were made with each of the producers' branch markets where the closed pools were scheduled for the next week. The packing company sales office has then estimated what percentage the pools may provide of their next week's need.

Early in the day of each pool the Plant X order buying department has telephoned the Eastern Order Buying Company and a price was bargained on for each pool. Most of the buyers do not see the live lambs at the local pools. The prices offered for the pool lambs have been based on the agreed grading standards and the past performance of each pool. Trucks or rail shipping instructions have been given at this time.

At the end of each lamb pool the local lamb grader prices the lamb pool grades according to the graders' estimate of the dressing percentage and carcass grade. It has been very important for the lamb graders to know current price values of lambs and be able to estimate the performance of the grades.

Plant X would later supply the Producers Order Buying Company with a report on how all the pool lambs yielded and graded for each pool market. At the next lamb pool the pricing would be based on the previous pool performance at Plant X.

Thus each market pool committeemen have always been concerned with the performance of each pool. Committeemen have been interested in

weighing conditions, degree of fill, and the length of time the lambs have been in shipment to the killing plant.

The Plant X buyer and local market grader always have had to consider the collective value of the pelt and offal credits. Pelts have ranged from twenty-five cents per lamb, to $4.50 per hundredweight for fully wooled lambs during the current marketing year. The offal credits have been relatively less important.

Lamb pool committeemen have been assigned certain work days at the pool. The committeemen usually have taken charge of the unloading, penning, putting on the paint brand, and visiting with the producers who were consigning their lambs. Thus much production and marketing knowledge was spread through the local leaders to producers.

IV. METHODS AND PROCEDURE

Choosing the Counties

The pool areas for study were set up as follows: (a) the county where the first lamb pool program was started in Ohio, (b) all the county pools which were graded by the same grader and sold by the same branch market, (c) at least one pool program would be present in each of the four Ohio County Extension Agent Districts. The four Ohio County Extension Districts have represented very well the four different areas of Ohio where the livestock production patterns have been similar.

Clinton County met the requirement of being the county where the first Ohio lamb pool program was started, in 1933.

Madison County (London), Union County (Marysville), and the Ashley pool program were the only pools where more than one Ohio pool was graded, sold, and field work done through one Producer Branch Operation--The Columbus Producers Association.

Clinton County (Wilmington) and Madison County (London) are in the Southwest Ohio County Agent's District. The Union County pool (Marysville) is located in the Northwest District. The Ashley pool is located in the Northeast District. The Lancaster pool has served three counties in the Southeastern Ohio's County Agent District.

Source of Data for Analysis, Charts, and Tables

Records for making the analysis, charts, and tables for the five pool areas were secured from the Ohio Agricultural Extension Service files, and the Eastern Order Buying Company office, as well as the County Sheep Improvement Committees. One of the responsibilities of the local Producer Livestock Marketing Association was to make regular reports following each pool to the County Extension Agents and the Eastern Order Buying Company.

The five production and marketing years of 1954-1955, 1955-1956, 1956-1957, 1957-1958, and 1958-1959 were used for the analysis.

An analysis and statistical data was prepared for the year 1954-1955 and presented to all of the County Sheep Improvement Committees, County Agents and Marketing Agencies in each of the pool areas.

V. RESULTS AND DISCUSSION

Effect of Lamb Pool Volume

During the 1958-1959 marketing season the number of lambs and sheep consigned per pool day for the five areas averaged: Lancaster-558 head, London-434 head, Ashley-308 head, Marysville-290 head, and Wilmington-232 head. A sufficient volume of lambs per market day has been one of the major reasons for establishing lamb pools. The freight or trucking rates have made it necessary to move full car or truck loads to the out-of-state packing plants. Most of Ohio's pool lambs were scheduled for the killing-floor within forty-eight hours after loading. Friday's pool lambs have been scheduled for Monday's kill. Field service expenses of the cooperating marketing agencies have also made it necessary for the pool's volume to average at least one carload of lambs per pool day. In Ohio it has been necessary to schedule an average of two pool days per month during the season to accommodate the "topping-out" program of the consignors.

Volume of quality lambs has contributed to effective marketing. Factors considered in Ohio before selection of a possible pool concentration center have been: market service available, converging highways, and the established number of sheep and lambs marketed within the area.

During the 1954-1958 period auction markets for graded lambs have been developed within twenty-five miles of the Ashley, Lancaster, Marysville, London and Wilmington pools.

Lamb production in Madison County and in the other four pool areas has determined the number of lambs available for market through the pools. According to the Agriculture Census (1954), thirty-six percent of the Madison County farms reported an average of thirty-eight sheep and lambs per farm. Madison County sheepmen consigned fifty-one percent of the available volume to the London lamb pool in 1954. Pool consignments were received from all townships.

Madison County sheepmen contributed 76.4 percent of the volume; the five adjoining counties contributed 23.6 percent during the 1954 season. With few exceptions, consignment mileages to the London Pool were less than twenty-five miles. Ninety-one head of lambs were sold for each one hundred head of sheep and lambs on the farms, January 1, 1954, in the six counties contributing lambs to the London Pool.

The number of head of lambs pooled during the eighteen year period, 1941-1958, in the London lamb pool totaled 156,079 head, Table 1.

According to the Agricultural Census (1954), 414 of the Clinton County farms reported sheep and lambs with an average of 28.5 brood ewes per farm. The number of head consigned through the Wilmington pool during the twenty-six year period, 1933-1958, totaled 171,292, Table 1. The 1955 pool was the largest with 11,105 head marketed.

Timely marketing encouraged. One of the objectives of Ohio's lamb pool program has been to encourage timely "topping-out" of the lambs. One of the operation problems of pool programs has been to schedule enough pool days per year in order to encourage regular "topping-out" of lambs.

The average number of sheepmen who have consigned lambs to the five pool areas has been 26.6 per pool day during the 1955-1958 period, Table 4.

The number of consignors per pool day by each individual pool has been: Lancaster 31.6, Wilmington 27.5, Marysville 27.0, London 25.9, and Ashley 21.1. The average number of lambs consigned by each producer has been 16.9 lambs per pool day during the 1955-1958 years. The number of lambs per consignor at each pool day was: Lancaster 19.3 head, London 18.0, Wilmington 17.5, Ashley 16.8, and Marysville 14.1.

This data indicates that the Clinton County Sheep Improvement Committee had a forty-six percent loss in the number of consignors during the 1958 marketing year. The number of lambs consigned by each sheepman per pool day through the Wilmington pools decreased twenty-four percent. This would indicate that a change in the marketing procedure of the pool lambs was needed.

From this data, one can conclude that lamb pools have had some handicaps, one of which has been scheduling. Lamb pools have been scheduled two to three weeks apart during the lamb marketing season. Other outlets have been offered for lamb marketing every day. Another handicap has been the failure of marketing agencies to provide timely field service.

Henning et. al. (1958) reported that the Ohio's livestock marketing system at the time of this study was made up of three terminal markets, 71 auctions, 134 local markets, 49 packer buying stations, and 159 dealers. Henning et. al. also reported that convenience was the most common factor given by farmers in selecting the market outlet for slaughter livestock. Higher price was second most common reason given. These facts indicate that the 659,000 head of lambs marketed during 1957, as reported by the Agricultural Marketing Service (1959), were not sufficient numbers for all the markets to attempt a pool type program.

TABLE 4

AVERAGE NUMBER OF CONSIGNORS PER POOL AND
LAMBS PER CONSIGNMENT FOR FIVE OHIO POOLS

	Ave. Consignments Per Pool					Ave. Head of Lambs Per Consignment				
Area	1955-1956	1956-1957	1957-1958	1958-1959	Ave.	1955-1956	1956-1957	1957-1958	1958-1959	Ave.
Ashley	24	23.3	18	19.2	21.1	17.1	16.5	17.3	16.1	16.8
Lancaster	34	15.4	40	37.0	31.6	16.2	31.2	14.8	15.0	19.3
London	31	21.9	25.1	25.6	25.9	17.4	19.4	18.0	17.0	18.0
Marysville	26	34.3	22.9	24.8	27.0	13.9	14.3	16.6	11.7	14.1
Wilmington	35	32.8	27.4	14.7	27.5	16.7	16.4	20.9	15.8	17.5
Average	30	25.5	26.7	24.3	26.6	16.3	19.6	17.5	14.1	16.9

Effects of Closed Pools on Lamb Marketing Practices

The five pool areas of Ashley, Lancaster, London, Marysville and Wilmington have operated as closed pools during the 1954-1958 periods. There has been a decline in the number of lambs consigned through the five pool areas involved in this analysis, Table 5. Ashley's (Union County) volume declined 28.3 percent, from 7300 to 5244 during the period. The Lancaster area pool declined from 15,789 to 12,276, or twenty-two percent.

The London (Madison County) area pool declined 8.9 percent. The London pool volume has not declined consistantly since 10,082 head were consigned during the 1956 season. The Marysville (Union County) pool volume has shown a decline of 28.3 percent during 1958-1959 as compared to the previous year.

The Wilmington (Clinton County) area showed the greatest decline - 76.5 percent, or a decrease from 10,741 marketed during the 1954 season to 2,524 in 1958-1959. The regular, graded, weekly auction market at Wilmington has increased its volume more than the seventy-six percent lost from the pool program during the same period of time. This auction market has been held weekly and at the same market location where the closed pool lambs have been graded. Other weekly auction markets have reported an increased volume of lambs.

During 1956 many of the Sheep Improvement Committees became interested in studying the value of opening the closed pools and selling the lambs at graded auctions. Some of the reasons for the study were:

(1) Increased producer interest in the auction method of selling cattle, hogs, and lambs.

(2) Opportunity for market agencies to find small killers of sheep to increase buying competition.

(3) Opportunity to secure the buying services of Teegardin's Buying Company, in addition to Swift and Company.

Since the 1955-1956 marketing season when there were 22 pools, changes have been made in methods of selling lambs at six Ohio pools, Table 6. The percentage of Ohio lambs marketed through the closed pools has declined from 18.2 percent in 1954 to 11.7 percent in 1958, Table 7.

Ohio's lamb pools have demonstrated for the past 25 years the advantages of marketing lambs in co-mingled lots by grade. There has been an increased acceptance by other Ohio marketing agencies of the marketing practices demonstrated. Lambs from the six pools selling on a graded auction were not included in the 1957 or 1958 lamb pool volume. Accurate records of grades were not available from these auctions. These market areas changed to graded auctions in order to increase competition through buyers than were available through the closed pool program. The Ohio Agricultural Extension Service has actively cooperated with Sheep Improvement Committees in twelve other counties during 1958, where local auction markets have indicated an interest in selling lambs in co-mingled lots by grade. The volume of these markets has not been included in the Ohio lamb pool volume because of the lack of uniform grading and accurate records. The County Sheep Improvement Committees have not volunteered labor for these weekly auction programs.

Field visitations indicate that the shift made by the six counties from closed pools to regular weekly auctions of lambs has shown these handicaps of marketing lambs through a weekly auction:

(1) Appeal of the auction method of selling has not always insured

more buyers for the lambs. Three of the markets have had no buyers or only one buyer present at auctions during the season.

(2) Lack of volume to ship full loads of lambs has increased marketing costs. Lambs have been held over and shipped to other local markets.

(3) Lack of volume at three of these auctions has discouraged the grading and selling lambs on their merits.

(4) Less incentive from sheep improvement committees to continue the lamb production improvement programs. This has occurred in four of these markets since the closed pool method of selling has been dropped.

(5) Three of the six former pool markets have not had an experienced lamb grader to do the grading and make farm visits. This service had formerly been supplied by the Eastern Order Buying Company during the time the pools were in operation.

These handicaps have indicated some of the reasons that the County Sheep Improvement Committees have continued the closed pool programs. The pool program has given the Ohio Agricultural Extension Service the opportunity to work with the County Committees and the sheepmen in educational demonstrations.

TABLE 5

VOLUME OF LAMBS CONSIGNED THROUGH FIVE OHIO POOLS AND ALL OHIO POOLS FOR FIVE YEAR PERIOD, 1954-1958

Year	No.of Pools	Wooled Lambs	Clipped Lambs	Pool Total
Ashley Area Lamb Pool				
1958-1959	17	2892	2352	5244
1957-1958	17	2993	2343	5336
1956-1957	17	4545	1775	6563
1955-1956	17	4175	2740	7129
1954-1955	16	5268	2032	7300
Lancaster Area Lamb Pool				
1958-1959	22	9579	2697	12,276
1957-1958	22	9269	3971	13,240
1956-1957	22	8256	1916	10,595
1955-1956	22	9509	2208	12,181
1954-1955	23	13,492	2247	15,739
London Area Lamb Pool				
1958-1959	20	7568	1113	8681
1957-1958	19	7609	1031	8640
1956-1957	17	7930	1088	10,082
1955-1956	17	8167	615	9296
1954-1955	17	9166	279	9445

TABLE 5 Continued

Marysville Lamb Pool

Year	No.of Pools	Wooled Lambs	Clipped Lambs	Pool Total
1958-1959	16	3078	1563	4641
1957-1958	17	3807	2669	6476
1956-1957	15	4234	1010	5490
1955-1956	16	5072	534	5832
1954-1955	16	5149	555	5704

Wilmington Lamb Pool

Year	No.of Pools	Wooled Lambs	Clipped Lambs	Pool Total
1958-1959	13	3027	503	2524
1957-1958	13	5378	2082	7460
1956-1957	20	9603	280	10,747
1955-1956	19	9632	112	11,105
1954-1955	17	10,403	338	10,741

Ohio Pools

No.Pools Included	No.of Pool Areas	Wool Total	Clipped Lambs	Pool Total
1958-1959	16	57,581	15,902	73,483
1957-1958	18	67,621	25,391	93,012
1956-1957	20	85,098	19,590	104,688
1955-1956	22	95,294	23,998	119,292
1954-1955	17	107,198	25,097	122,295

TABLE 6

LOCATION OF OHIO LAMB POOLS SHOWING TREND
TO GRADED AUCTION METHOD OF PRICING
1958

Location of Grading Center		(1) Operated as Closed	(2) Closed Pool Dropped. Weekly
Town	County	Pool	Graded Auction
Wilmington	Clinton	yes	
Eaton	Preble	yes	
Hillsboro	Highland	yes	
Findlay	Hancock	yes	
McGonigle and) Hughes Station)	Butler	yes	
Lebanon	Warren	yes	
Washington C.H.	Fayette	yes	
London	Madison	yes	
Greenville	Darke	yes	
S.Charleston	Clark	yes	
Marysville	Union	yes	
Bellefontaine	Logan	yes	
Ashley	Delaware	yes	
Lancaster	Fairfield	yes	
Greenwich	Huron		yes
Mt. Vernon	Knox		yes
Coshocton	Coshocton		yes
Bucyrus	Crawford		Yes
Upper Sandusky	Wyandotte	yes	
Wapakoneta	Auglaize	yes	
Hicksville	Defiance		yes
McConnelsville	Morgan	yes	

(1) Closed pools mean that all the lambs have been graded and paint marked. All the lambs and sheep are sold to one Order Buying Company during the current marketing year.

(2) Graded auctions mean that the lambs are graded. The lambs have been sold to the highest bidders by the auction method. No packer is committed to take all or part of the pool.

TABLE 7

OHIO LAMB CROP MARKETING DISPOSITION*
NUMBER LAMBS SAVED AS PERCENTAGE OF EWES ONE YEAR
OLD AND OLDER* AS COMPARED WITH LAMBS MARKETED
THROUGH CLOSED POOLS FOR FIVE YEAR PERIOD, 1954-1958

	Years				
	1954	1955	1956	1957	1958
Ewes One Year and Older	874,000	847,000	849,000	829,000	846,000
Lambs Saved as Percentage of Ewes	100	103	103	101	103
Disposition of Lamb Marketings	670,000	670,000	676,000	659,000	627,000
Total Lambs Sold Through Ohio Closed Pools	122,295	119,292	104,688**	93,012**	73,483**
Percent of Ohio Lambs Sold Through Closed Pools	18.2	17.8	15.5**	14.1**	11.7**

* Agricultural Marketing Service(1959)

** Lambs sold through graded auctions have not been included. Accurate records not available.

Improvement of Lamb Quality through Pools

The primary purpose of Ohio lamb pools has been to encourage sheepmen to produce and market lambs on the basis of their quality, weight, type, finish, and condition. Other objectives have been to strengthen an improved market service for quality lambs and expand new market outlets.

The five Ohio lamb pool areas involved in this study have been graded by four trained, experienced, market lamb graders. Experiences in Ohio have shown that live grading has varied by pools and seasons with new graders who have lacked experience. Market lamb graders, county Sheep Improvement Committeemen, Order-Buyers, and Ohio Extension Service workers have cooperated to establish uniform grading standards and to train graders, Table 8. Other states have reported that graders from the Department of Agriculture have been necessary to help encourage standard methods of grading.

The reported rail performances of the previous lamb pool lots have been taken into consideration during the pool seasons.

Breimyer (1959) reported that carcasses of lambs have been commonly sold by weight classes. In lamb, quality has been recognized separately from weight. Grades have not been a measure of consumer preference; but grades have become the means through which consumer preferences have been expressed.

In comparing the lambs marketed during the 1954-1958 period, with those marketed the first five years of the pools the records show that the sheepmen have made major changes in grade, weight, and type of lambs produced, Table 9.

The results of these data indicate that with the present breeding, management, and feeding systems, lamb pool programs have encouraged interested sheepmen in these five areas to improve the quality of the lambs and to increase average returns per head. During this five year period all lambs consigned graded an average of 19.6 percent in Double Blue grade, 37.1 percent as Single Blue, 19.3 percent as Red, 6.2 percent as Yellow, and 4.2 percent were graded as Bucks. The pool program has encouraged consignors to market not over 2.1 percent as Link Blue or heavy weight lambs, and only 8.8 percent were graded as feeders. During the 1954-1958 marketing seasons 56.7 percent of the lambs consigned in the five pool markets were graded as Blue wool lambs. When this percentage is compared to the 32.0 percent for the first five years of these pools, there has been an increase of 24.7 percent in the numbers of lambs grading Blue and an improvement in quality. A total of 77.6 percent of Clipped lambs have graded in the Blue grade during the 1954-1958 period.

It may be concluded that more research and educational work is needed to further help producers increase the percentage of lambs grading choice and the percentage of lambs reaching market earlier in the season.

Quality and type of lamb meat demanded by consumers would have been more highly reflected back to the Ohio lamb pool consignors, had the packers been able to kill all the lambs by grades, and had they reported the wholesale acceptance by grades back to the consignors.

Sheepmen cooperating in these lamb pool programs have requested production testing programs and more meat research, in order to help make possible the production of an improved meat type lamb carcass which will meet with increased consumer interest. Sheepmen have requested additional

lamb marketing research on methods to improve live-lamb grading standards.

Three handicaps of lamb pool programs have been: (1) rigid sorting of lambs has not been desired by all sheepmen; (2) failure of a consignor to participate in production improvement programs; and (3) lack of understanding on the part of educational workers that the grading phase of the pool programs, without production improvement programs, has not changed the quality of the lambs consigned by the producers. The Wilmington pool area reached a higher percentage of Blue lambs than the other four areas during the first years, because of a very successful County Sheep Improvement program.

TABLE 8

ESTABLISHED UNIFORM GRADING STANDARDS

FOR OHIO LAMB POOLS REVISED, JUNE 1955

Live Grade	*Established Yield	Carcass Grade	Differential
**Double Blue	48.5--49.0%	All Prime	
**Single Blue	47.5%	All Choice	$ .75 to $1.00 Under 00 Blue
**Red	45.5%	All Choice	$1.00 Cwt. Under 0 Blue
**Yellow	44.0%	All Good	$1.00 or more Under 0 Red

*One percent in yield means forty to fifty cents per hundredweight differential alive, depending upon the wholesale dressed lamb price.

**Weights of Double Blue live lambs should average above ninety pounds; the single Blue above eighty-five pounds and Red above seventy-five pounds.

TABLE 9

PERCENT OF WOOL LAMBS BY GRADE
FOR FIRST FIVE YEARS OF FIVE POOLS COMPARED
WITH PERIOD OF 1954-1958

Pool Area	% D. Blue	% S. Blue	% Red	% Yellow
Ashley				
First 5 Years	5.0	25.4	38.6	23.0
1954-1958	17.8	41.7	20.1	6.2
Lancaster				
First 5 Years	16.0	25.1	20.7	3.1
1954-1958	18.6	32.2	16.9	3.8
London				
First 5 Years	18.5 Blues		43.0	38.5
1954-1958	16.6	36.9	20.7	7.9
Marysville				
First 5 Years	13.3 Blues		40.7	46.0
1954-1958	15.9	36.1	23.4	6.8
Wilmington				
First 5 Years	20.5	36.3	13.8	3.4
1954-1958	29.7	35.7	16.1	3.4

Effects of Seasonal Lamb Prices on Value of Lambs

The annual average lamb price for all of the wool lambs consigned through the London lamb pool markets varied from $19.56 per hundredweight, in 1955, to $21.54, for the 1957-1958 marketing season. This was a variation of $1.98 per hundred or 5 percent live-weight during the five years, Table 10. Boger (1949) reported a similar percent variation in the annual price of lambs.

As shown in Tables 11 and 19, wool lamb prices varied more within any of the five marketing seasons by years, than the annual prices varied by years. Wool lamb pool prices varied $3.43 in 1954 from the high to the low monthly price. For 1955 the variation was $5.87; 1956, $4.83; 1957, $3.67; and 1958, $5.75.

This indicates that sheepmen in the London pool should have been more concerned with the seasonal price variation than with the average annual price variation.

Badger et.al. (1958) found that prices of lambs follow a fairly regular seasonal pattern because of the seasonal nature of production, and to a lesser extent seasonal demand.

Similar seasonal price variations have appeared during the five marketing seasons of 1954-1958 for Ashley, Lancaster, Marysville, and Wilmington.

During the five marketing years the average price of all the wool lambs started out the highest in June and July and fell unevenly to the seasonal low during October, November, and December. The 1958 marketing season was an exception when prices declined unevenly to the seasonal low

in February, 1959. Badger et.al. (1958) found that there is more variation in spring lamb prices than in fed lamb prices.

Seasonal movement of lambs. The greatest percentage of lambs has been marketed during the seasonal market period of October, November, and December. A downward seasonal price movement appeared in all of the five market pools at this period during the five year period 1954-1958. The seasonal price moved upward during the January, February, and March seasonal period, but did not move above the June and July price. October has shown the largest receipts for the five market pool areas during 1954-1958. The second highest consignment through the five Ohio market pools, has been during the August and September period, Tables 11 through 19. This percentage has been increasing as pool programs have continued.

In the Madison County pool, 16.6 percent of the lambs have been consigned during the June and July period. The percentage of lambs consigned during the June and July period in Ashley, Marysville, and Lancaster has been under 10 percent. Sheepmen in these areas could have increased their income by having lambs ready to market at this period.

The largest percentage of the wool lamb consignment during the June and July period, for the five pool markets, has been at Wilmington. There has been a gradual increase in percentage over the years.

The average weight of lambs consigned by Madison County sheepmen has been highest during the June and July seasonal period, and decreased thereafter with a low during January and February. The percentage of wool lambs consigned during the two early seasonal periods has been: 50 percent for Wilmington, 48 percent for London, 45 percent for Lancaster, 35 percent for Marysville, and 22 percent for Ashley.

Returns per head for lambs marketed. The average value per head for all lambs fell to a seasonal low during one of the months in the October, November, and December period of 1954 through 1957. The average value received per head for lambs in the five market lamb pools increased during the January, February and March period and approached the June and July values. The value per head continued to decline during 1958 until March of the 1958-1959 marketing season.

For lambs consigned at the London pool, the spread per head in value between the highest and the lowest seasonal period has been $4.04, $5.41, $3.60, $3.92, and $5.43 for the five year period. This indicated that Madison County sheepmen consigning lambs during October, November, and December have grossed an average of $4.48 less, for a lamb which averaged only 1.5 pounds less in weight, than lambs marketed in June and July.

This same seasonal price variation, has occurred in the other four lamb pool markets.

Seasonal variations in grade. The highest percentage of Blue grades of wool lambs has been marketed during June and July, Tables 11 through 19, for all of the five market pool areas during the 1954-1958 period. There has been a downward trend in the percentage of lambs grading in the Blue grades from June and July until the November and December period.

Seasonal variation in weight. Data in Tables 11 through 19 indicates that the sheepmen in the five lamb pool market areas have done a very good job of "topping-out" the lambs during the season. The seasonal average-weight variations, for all wool lambs consigned, have been within a range of 0.5 to 3.5 pounds. Sheepmen have also done a good job in "topping-out" the lambs in order to avoid heavy weight carcasses or the Link Blue grade of

live lambs. The Link Blue percentage has only averaged 2.1 during the five year period for the five market pool areas.

The sheepmen in the five areas have discussed whether it would pay to change the breeding, feeding, and management practices in order to realize greater returns from the seasonal price variation, and whether it would fit into their management program. In these five areas, as well as in all of Ohio's lamb producing areas, there has been a definite trend and interest in changing breeds of rams, and a change in brood ewe selection to help insure faster gaining lambs.

During the five year period there has been a definite increased demand for more research information on creep feeding lambs, the creep feeding of lambs in barn lots without going to pasture, earlier weaning, and the type of breed, rams, and ewes to select. Bell (1958) stated that if more progress was to be made in the faster growth and the earlier marketing of the lamb crop, more research was needed to understand the following traits in sire and dam for lamb production; adequate milk supply; inherent growth rate potential of rams and ewes; and the heat cycle characteristics.

Pope (1958) reported that one of the most important areas of sheep investigation in the future will be the study of sheep breeding and nutrition.

Personal visitations with the sheepmen in the five areas have indicated that many have a definite interest in gearing their lambing program to the maximum use of high quality forage-pastures as the method of fattening the lamb crop. There has been an increased interest among other

sheepmen for earlier lambing, selection of mutton rams with high gaining growth potential, and for early creep feeding of lambs.

TABLE 10

MADISON COUNTY LAMB POOL COMPARISON
BY YEARS 1954-1958

	1954-55	1955-56	1956-57	1957-58	1958-59
Total Consignors	313	316	299	272	281
Av. Head Per Consignor	29.6	29.4	33.7	31.8	30.9
Total Wool Lambs	9166	8167	7930	7609	7568
Total Clipped Lambs	279	615	1088	486	638
Total Western Lambs		125	592	103	
Total Sheep and Lambs	9445	9296	10082	8640	8681
Av. Price All Wools	$20.28	19.56	20.33	21.54	21.48
% of Blue Wool Lambs	55.6	61.7	58.4	60.4	54.4
% of Red Wool Lambs	20.9	20.8	20.0	17.7	23.7
% of Yellow Wool Lambs	9.2	8.1	7.7	7.4	7.2
% of Buck Lambs	5.3	3.5	4.8	5.0	2.6
% of All Other Wool Lambs	9.0	5.9	9.1	9.5	12.1

TABLE 11

SEASONAL VARIATION OF THE 1954-1955 LONDON LAMB POOL

	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Season
Number of Pools	2	2	2	3	3	2	1	2	17
Receipts of All Lambs	1106	1568	1513	1089	1186	1172	662	870	9445
				Wool Lambs					
Receipts by Months	1106	1568	1513	1089	1186	1172	662	870	9166
% Receipts by Months	12.1	17.1	16.5	11.9	12.9	12.7	7.3	9.5	100.
Av. Price 00 Blue Lambs	$23.50	22.75	21.75	20.92	21.33	21.75	22.50	22.88	22.38
% of Blues	78.5	66.1	55.8	43.5	40.2	43.1	61.2	27.9	55.6
Av. Price All Lambs	$22.49	21.18	19.73	19.06	19.08	19.66	20.59	19.90	20.31
Av. Weight All Lambs	85.4	83.6	77.5	79.1	80.9	83.7	85.9	79.2	81.9
Av. Value Per Head All Lambs	$18.86	17.73	16.11	14.82	15.44	16.44	17.69	15.79	16.61

TABLE 12

SEASONAL VARIATION OF THE 1955-1956 LONDON LAMB POOL

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Season
Number of Pools	1	2	3	2	2	2	2	2	1	
Receipts of All Lambs	257	593	1610	1239	1182	1665	847	1030	494	8907
				Wool Lambs						
Receipts by Months-Wools	257	593	1610	1239	1182	1583	757	675	271	8167
% Receipts by Months	3.1	7.3	19.7	15.2	14.5	19.4	9.3	8.2	3.3	100.
Av. Price OO Blue Lambs	$24.25	23.25	22.33	20.75	20.38	19.75	19.00	20.37	21.00	21.03
% of Blues	68.1	82.1	59.8	63.9	52.2	54.6	46.6	60.0	57.4	59.9
Av. Price All Lambs	$23.26	22.38	20.90	19.33	18.80	18.22	17.39	19.07	19.86	19.91
Av. Weight All Lambs	84.8	85.6	81.7	84.1	80.2	83.2	82.3	87.8	89.3	84.3
Av. Value per Head All Lambs	$19.72	19.15	17.08	16.40	15.20	15.32	14.31	16.68	17.74	16.84

TABLE 13

SEASONAL VARIATION OF THE 1956-1957 LONDON LAMB POOL

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Season
Number of Pools	1	3	2	2	3	2	2	2	1	18
Total Lamb Receipts	237	1455	819	1432	2159	997	926	1068	517	9610
				Wool Lambs						
Wool Lamb Receipts	237	1455	819	1432	1885	876	833	304	89	7930
% of Wool Lambs by Months	3.0	18.4	10.3	18.1	23.8	11.0	10.5	3.8	1.1	100.
Av. Price OO Blue Wools	$23.00	23.87	23.38	22.00	20.50	20.50	20.00	20.75	21.75	21.93
% of Blues	84.0	71.0	60.0	55.0	56.0	59.0	47.0	72.0	69.0	58.4
Av. Price Wool Lambs	$22.29	22.69	21.50	20.36	18.94	19.04	17.86	19.41	20.38	20.23
Av. Weight Wool Lambs	84.2	81.8	82.9	84.0	85.0	84.2	85.0	91.0	88.2	84.0
Av. Value per Head All Wool	18.77	18.54	17.87	16.95	16.16	16.10	15.17	17.32	17.89	

TABLE 14

SEASONAL VARIATION OF THE 1957-1958 LONDON LAMB POOL

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Season
Number of Pools	2	3	2	2	2	2	2	2	1	18
Receipts of all Lambs	165	1073	1182	1028	1771	915	783	1009	272	8198
				Wool Lambs						
Receipts by Months	165	1073	1182	1020	1746	796	640	821	166	7609
Percent by Months	2.2	14.1	15.5	13.4	22.9	10.5	8.4	10.8	2.2	100
Ave. Price 00 Blue	$24.00	23.50	24.00	23.50	22.50	21.87	23.62	24.75	25.00	23.43
Percent of Blues	70.0	72.4	64.3	59.9	53.0	44.1	64.4	62.9	66.3	60.4
Ave. Price all Lambs	$23.44	22.15	22.23	21.33	20.61	19.77	21.77	22.60	23.48	21.54
Ave. Weight all Lambs	84.7	83.4	83.0	81.3	82.4	80.6	83.8	94.4	90.3	82.8
Ave. Value per Head all Lambs	$19.85	18.47	18.45	17.34	16.98	15.93	18.24	19.07	21.20	17.84

TABLE 15

SEASONAL VARIATION OF THE 1958-1959 LONDON LAMB POOL

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Season
Number of Pools	2	3	2	2	2	2	3	2	1	19
Receipts of all Lambs	125	859	909	1071	1582	1781	899	634	346	8206
				Wool Lambs						
Receipts by Months	125	849	909	1071	1582	1561	799	611	61	7568
% Receipts by Months	1.7	11.2	12.0	14.2	20.9	20.6	10.5	8.1	0.8	100
Ave. Price 00 Blue Lambs	25.00	24.61	24.61	23.36	23.00	23.00	22.71	20.77	19.75	23.40
% of Blues	83.2	78.0	58.4	53.8	57.3	45.3	42.4	42.6	62.3	54.5
Ave. Price all Lambs	24.22	23.50	22.78	21.50	21.47	21.18	20.32	18.63	18.47	21.48
Ave. Weight all Lambs	84.4	83.8	80.7	82.5	81.8	83.6	80.3	80.5	87.9	82.2
Ave. Value per Head all Lambs	20.44	19.70	18.37	17.73	17.57	17.70	16.32	15.01	16.23	17.65

TABLE 16

SEASONAL VARIATION OF THE 1957-1958 MORROW-DELAWARE-MARION COUNTY LAMB POOL

	June-July	Aug.Sept.	Oct.Nov.Dec.	Jan.Feb.Mar.	Apr.	Season
Number of Pools	2	4	5	5	1	17
Total Lamb Receipts	192	847	1552	1258	1204	5053
		Wool Lambs				
Receipts by Periods	192	715	1176	610	0	2693
% of Receipts by Periods	7.1	26.6	43.7	22.6	0	100
Ave. Price 00 Blue	$23.03	23.55	22.45	24.88	0	23.36
% of Blue Lambs	75.0	67.3	53.1	50.5	0	58.4
Ave. Price all Lambs	$21.64	21.53	20.39	22.25	0	21.30
Ave. Weight all Lambs	83.7	84.4	84.6	86.0	0	84.8
Ave. Value per Head all Lambs	$18.12	18.17	17.25	19.39	0	18.07

TABLE 17

SEASONAL VARIATION OF THE 1957-1958 LANCASTER LAMB POOL

	June-July	Aug.Sept.	Oct.Nov.Dec.	Jan.Feb.Mar.	Season
Number of Pools	3	5	6	6	22
Total Lamb Receipts	830	2957	5461	3992	13240
		Wool Lambs			
Receipts of Wools by Periods	789	2548	4065	1867	9269
Percent of Receipts by Periods	8.5	27.5	43.9	20.1	100.00
Ave. Price 00 Blue Lambs	$23.25	23.55	22.50	24.00	23.17
Percent of Blue Lambs	60.8	50.1	50.3	54.3	52.3
Ave. Price all Lambs	$21.27	20.86	20.28	21.16	20.89
Ave. Weight all Lambs	83.1	79.7	81.9	82.5	81.8
Ave. Value Per Head all Lambs	$17.88	16.63	16.60	17.62	17.18

TABLE 18

SEASONAL VARIATION OF THE 1957-1958 UNION COUNTY LAMB POOL

	June-July	Aug.Sept.	Oct.Nov.Dec.	Jan.Feb.Mar.	Season
Number of Pools	3	4	6	4	17
Total Lamb Receipts	266	1041	3330	1629	6266
		Wool Lambs			
Receipts by Periods	262	999	1934	612	3807
% of Receipts by Periods	6.9	26.2	50.8	16.1	100
Ave. Price 00 Blue Lambs	$23.12	24.46	22.46	24.33	23.26
Percent of Blue Lambs	74.0	37.0	51.6	49.0	49.0
Ave. Price all Lambs	$21.76	21.33	20.68	21.67	21.08
Ave. Weight all Lambs	84.0	83.6	84.3	83.7	84.0
Ave. Value per Head all Lambs	$18.27	17.82	17.42	18.14	17.70

TABLE 19

SEASONAL VARIATION OF THE 1957-1958 WILMINGTON LAMB POOL

	June-July	Aug.Sept.	Oct.Nov.Dec.	Jan.Feb.Mar.	Season
Number of Pools	4	4	5		
Total Lamb Receipts	1066	2436	3126	600	7228
		Wools			
Receipts by Periods	941	2400	2037	0	5378
% of Receipts by Periods	17.5	44.6	37.9	0	100
Ave. Price 00 Blue Lambs	$23.31	23.63	21.90		22.93
Percent of Blue Lambs	72.6	69.4	67.3		70
Ave. Price all Lambs	$22.38	22.21	20.59		21.56
Ave. Weight all Lambs	85.1	85.32	82.9		84.5
Ave. Value per Head all Lambs	$18.85	18.79	17.09		18.22

Price Comparison of Pool Lambs

The lamb pool price comparison for 1954, Figures 1 through 10, was prepared for the lamb pool committees, market agencies, and the Extension Service, for the five pool areas.

On July 16, Figure 1, the day of the first Ashley pool, the Chicago price for Prime lambs was $22.50, while Double Blue lambs brought $0.25 less. The same procedure was used in Figures 3, 5, 7, and 9.

On the day the first Ashley pool was held, the Chicago top price for Choice lambs was $21.50. Red grade lambs brought $21.25. Therefore, as Figure 2 shows, Red grade lambs sold for $0.25 less. The same procedure has been used for each of the other pools in Figures 4, 6, 8, and 10.

Figures 1, 3, 5, 7, and 9 indicated that the Double Blue price per hundredweight of the five pools compared very favorably with the Chicago Prime top prices during the June and July seasonal periods. The Single Blue varied $1.00 below Chicago Prime top prices at the Ashley pool to as much as $2.00 below prices at the Lancaster pool.

Figures 2, 4, 6, 8 and 10 indicated that the lambs grading yellow showed the most price variation among the five pools for the 1954 season.

Swift and Company (1957) reported an almost identical value for the Choice and Prime live lambs at Chicago as the New York City wholesale value of forty-nine pounds of lamb carcass.

Three major comments were given during a series of five field meetings: Ohio pool lambs are not priced according to the Chicago markets; prices paid for Ohio pool lambs were based on the wholesale lamb carcass prices and the demand of the New York and Massachusetts area; and sheepmen compared lamb pool prices with other local auction market prices paid

during the week.

Pool prices compared with local auction prices. A comparison has been difficult to make because of the lack of uniform grading standards and a reliable reporting system of auction prices, numbers, and weighing conditions.

In Table 20 the data have been reported for the 1958 Double Blue, Single Blue and Red grade prices, per hundredweight, received for the Wilmington lamb pool grades. The top three pen prices have been given for the Wilmington auction graded lambs sold during the same weeks, but not on the same day. The Wilmington Producers Association have the same lamb grader do the grading of the pool lambs and the auction lambs, and to follow the same grading and weighing conditions. The pool lambs were sold in a closed pool to Wilmington's Swift and Company.

The limited data in Table 20 shows these price trends. The number 1 pen of auction lambs sold for higher prices than the Double Blue pool grades during nine weeks. Double Blue pool grades sold higher during two of the weeks reported. There was a $0.39 price advantage per hundredweight in favor of the auction grade Pen 1. The pen 2 auction lambs sold higher than the Single Blue pool lambs during ten weeks. Single Blue grades sold higher during one week. There was a $0.58 price advantage per hundred in favor of the auction during the eleven weeks. In regard to the third grade lambs, lambs in the Red pool grade sold higher during ten weeks, and pen 3 of auction lambs sold higher during one week. There was a $0.44 price advantage per hundred in favor of the Red pool grade. This data indicated a need for price comparison studies.

Average price spread between grades. The data in Table 20 shows that the

average price spread between the Double Blue and Single Blues for 1957 and 1958 seasons were $0.99 and $1.19 per hundredweight. The average price spread between the Single Blues and Red wool lambs was $1.57 and $1.20 for the same two years. The 1955 established uniform grading standards for Ohio lamb pools, as shown in Table 8, called for a $1.75 to $1.00 spread between Double Blue and Single Blue. The price differential called for Red lambs to average $1.00 or more under Single Blues. This price spread between grades has been greatly influenced by the dressing percentage of the lambs. The Agricultural Marketing Service (1957) reported that during the year the live weight equivalent to one pound of retail lamb has varied from 2.28 to 2.43 pounds and averaged about 2.37 pounds. Changing yields of wool during the year has accounted for much of the variation in pounds of live lamb required to produce one pound of lamb at retail prices.

During the 1954-1958 period there was a need for Marketing Research projects to study the price comparison of various methods of the sale of lambs sold on the same days of the week. Sheep Improvement Committeemen, Marketing Agencies, and the Extension Service have needed more information on auction and other types of pricing in comparison to the closed pool method of pricing lambs.

TABLE 20

AVERAGE DOLLARS PER HUNDREDWEIGHT FOR FIRST THREE GRADES OF WOOL POOL LAMBS FOR THE FIVE CLOSED POOL AREAS, 1957 AND 1958 BY MONTHS

1957 Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Av. Prices in Dollars									
Double Blue	23.45	23.10	24.10	23.31	22.17	21.87	23.35	24.66	24.84
Single Blue	22.48	22.05	23.05	22.30	21.16	21.12	22.32	23.65	23.85
Red	21.03	20.49	21.69	20.79	19.89	19.37	20.37	21.91	22.34
1958 Year									
Av. Price									
Double Blue	25.00	23.90	24.37	23.14	23.00	23.15	22.01	20.84	19.91
Single Blue	23.99	22.91	23.35	22.25	21.53	21.90	20.96	19.84	18.84
Red	22.32	21.59	21.88	20.90	20.73	20.60	19.58	18.64	17.52

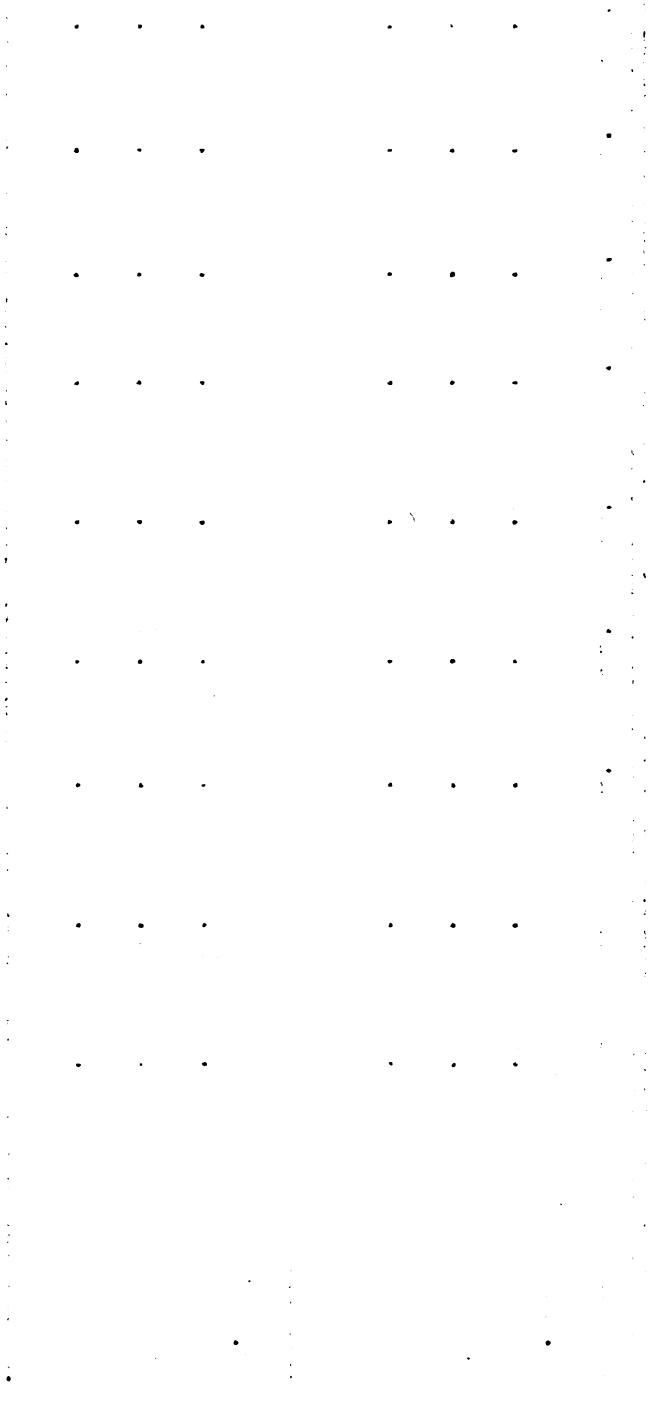

TABLE 21

DOUBLE BLUE, SINGLE BLUE, AND RED PRICES PER HUNDREDWEIGHT
FOR WILMINGTON LAMB POOL COMPARED WITH
TOP THREE PENS OF GRADED LAMBS SOLD
IN REGULAR AUCTION SAME WEEKS
1958

Date	Pool Lambs			Auction Lambs		
	Double Blue	Single Blue	Red	Pen 1	Pen 2	Pen 3
July 16	23.25	22.25	21.00	23.50	22.70	20.50
July 30	25.00	24.00	22.50	24.50	23.68	21.24
Aug. 13	23.25	22.25	21.00	24.00	23.15	20.50
Aug. 27	24.50	23.50	22.50	25.00	24.00	22.10
Sept. 10	22.75	21.75	20.75	24.00	22.80	22.32
Sept. 24	23.00	21.75	20.50	23.25	22.50	20.50
Oct. 10	22.75	21.75	20.50	23.00	22.00	20.30
Oct. 22	22.75	21.75	20.50	23.00	22.25	20.00
Nov. 5	22.50	21.50	20.25	23.00	22.00	20.00
Nov. 19	22.25	21.25	20.00	22.75	21.75	17.75
Dec. 3	23.00	21.75	21.25	22.50	22.58	20.00
Dec. 17	21.00	20.00	19.00	----	----	----
Weighed Average	23.19	22.33	21.01			

FIGURE 2

Red and Yellow Prices per Hundredweight by Pool Compared with Top Choice Prices at Chicago

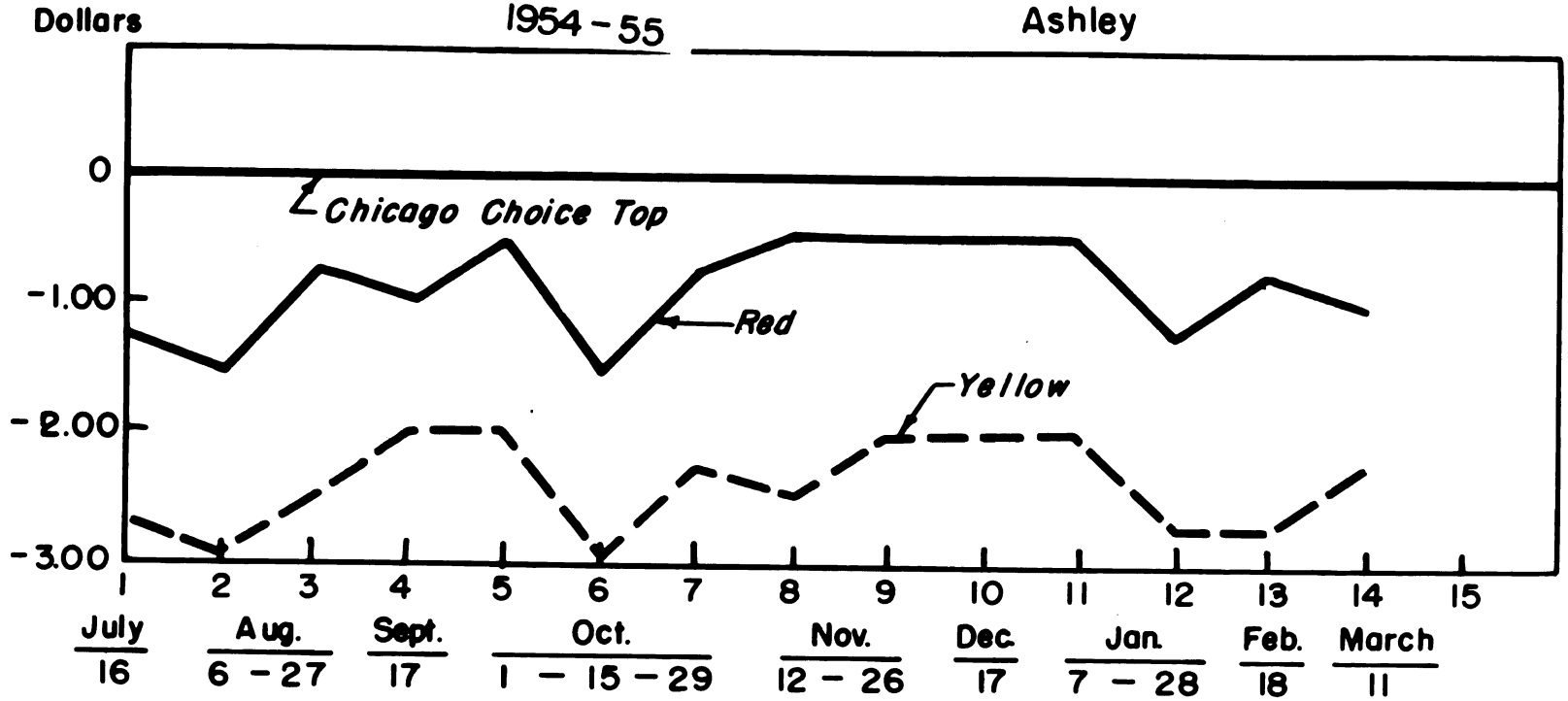

FIGURE 3

Double Blue and Single Blue Prices per Hundredweight By Pool Compared with Top Prime Prices at Chicago

1954 - 55 Lancaster

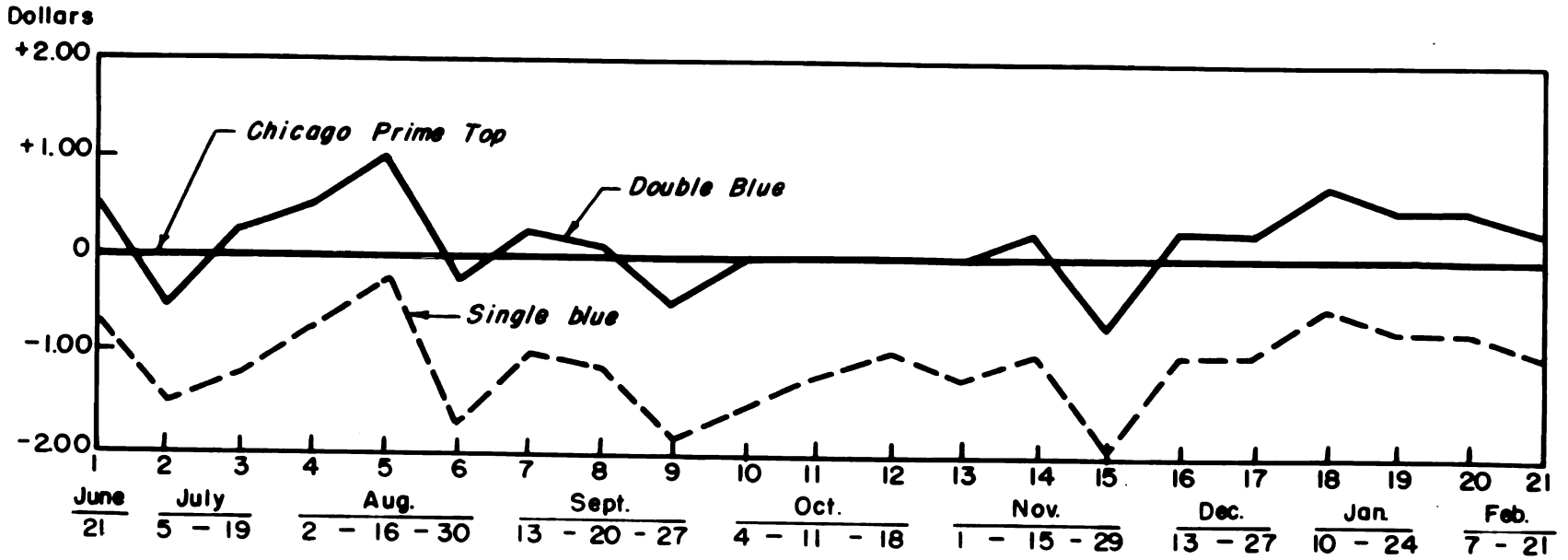

FIGURE 4

Red and Yellow Prices per Hundredweight Compared with Top Choice Prices at Chicago
1954-55 Lancaster

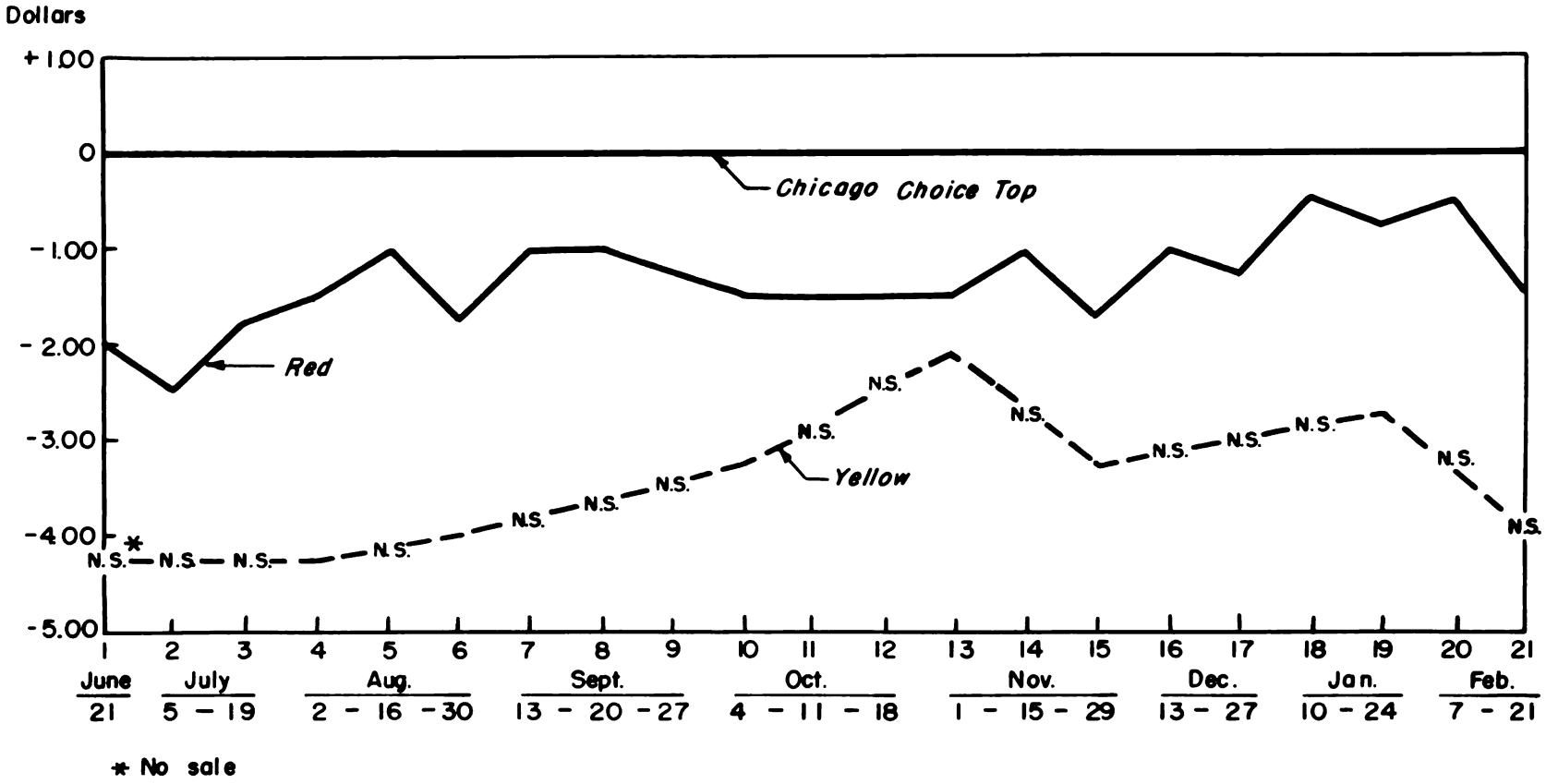

FIGURE 5

FIGURE 5

Double Blue and Single Blue Prices per Hundredweight By Pool
Compared with Top Prime Prices at Chicago
1954-55 London

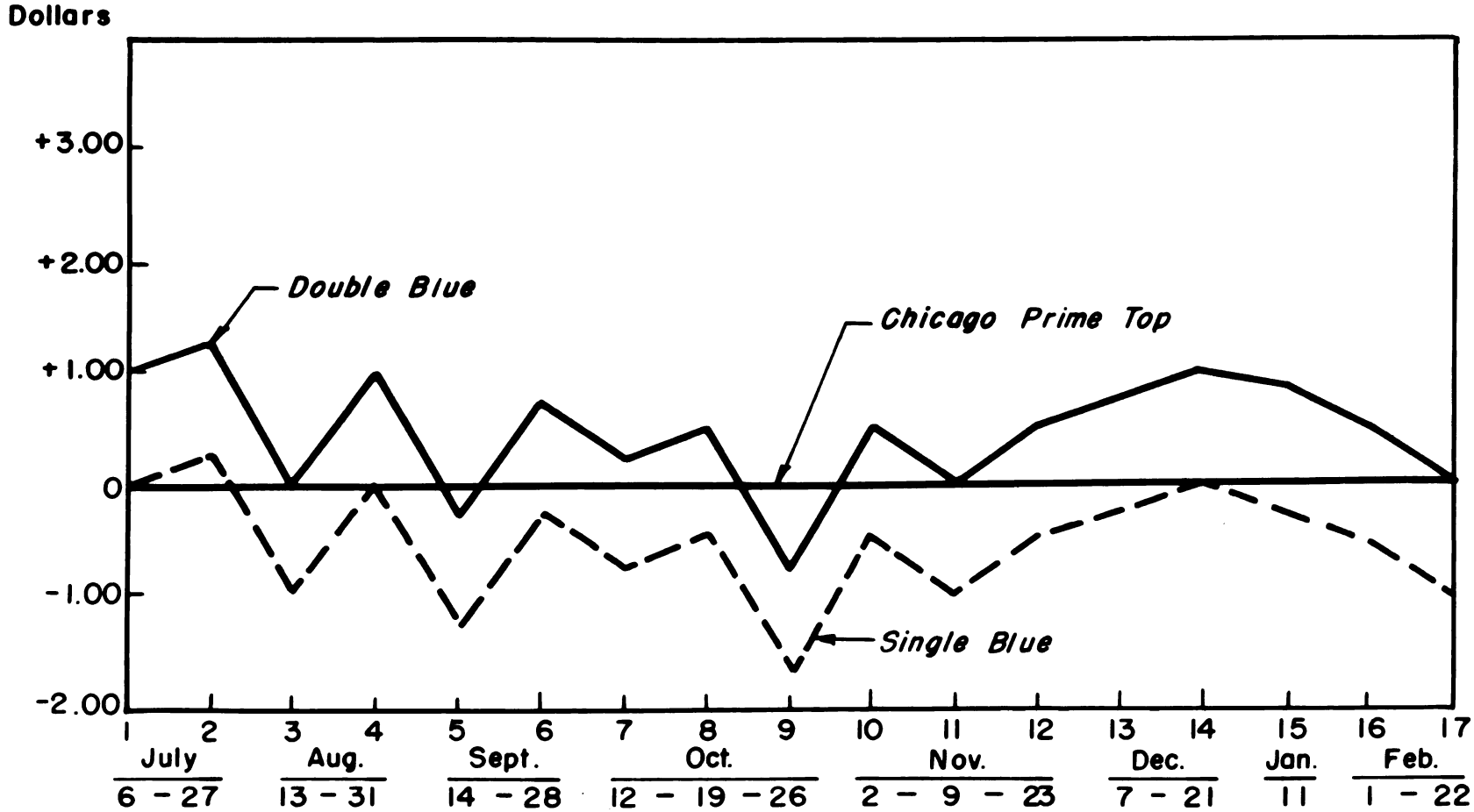

FIGURE 6

Red and Yellow Prices per Hundredweight by Pool

FIGURE 6

Red and Yellow Prices per Hundredweight by Pool
Compared with Top Choice Prices at Chicago

1954-55 London

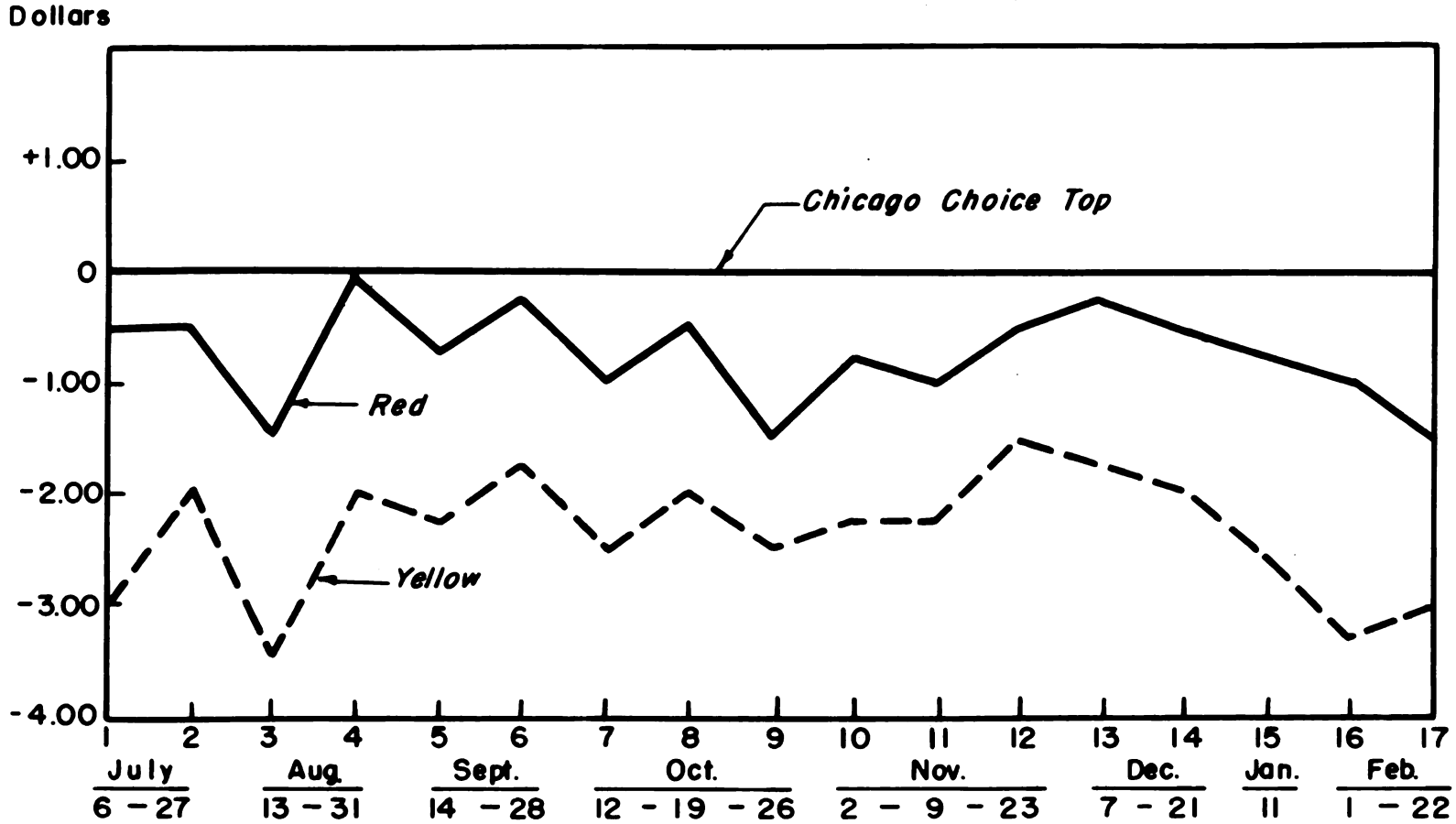

FIGURE 7

FIGURE 7

Double Blue and Single Blue Prices per Hundredweight
By Pool Compared with Top Prime Prices at Chicago
1954-55 Marysville

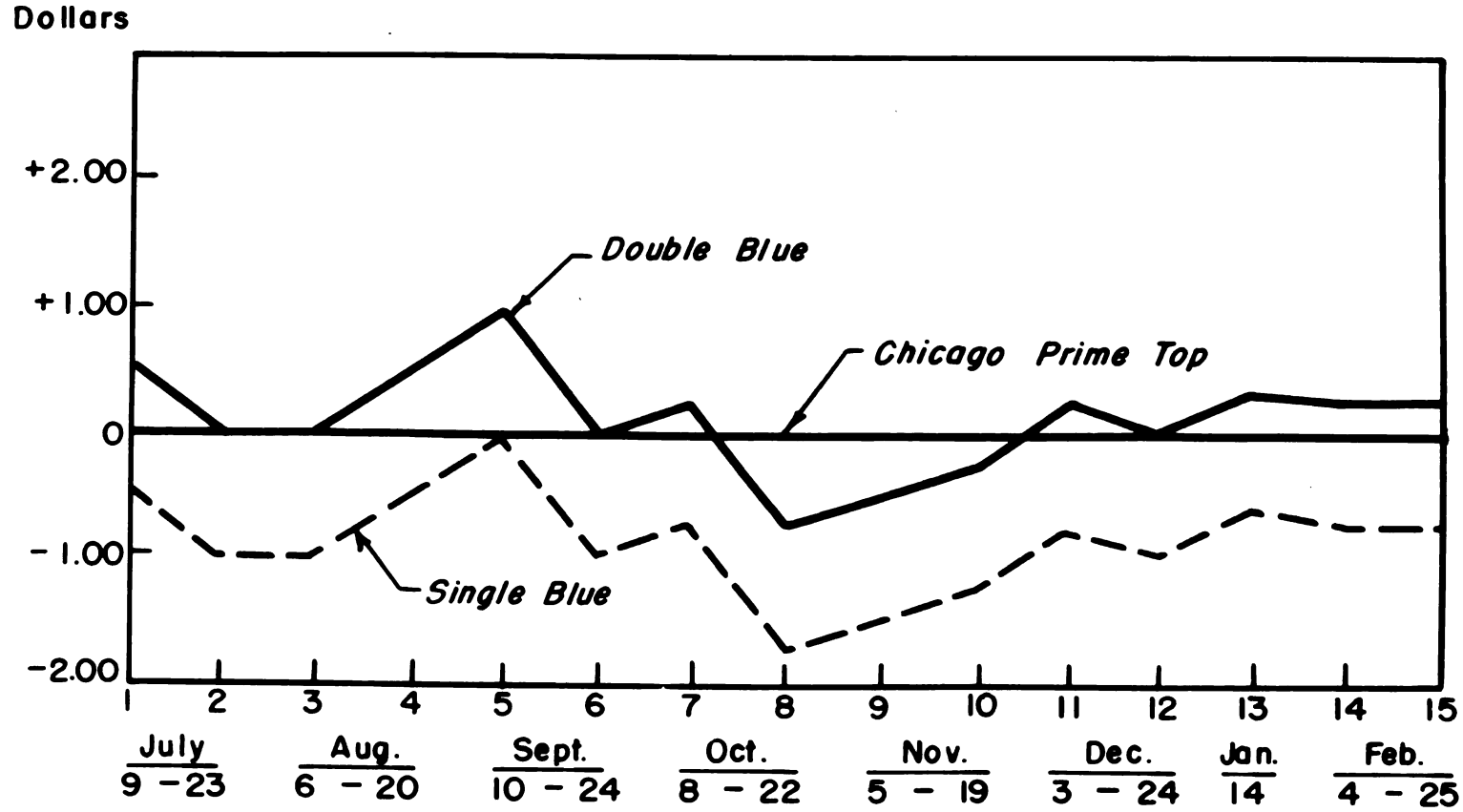

FIGURE 8

Red and Yellow Prices per Hundredweight by Pool
Compared with Top Choice Prices at Chicago
1954-55 Marysville

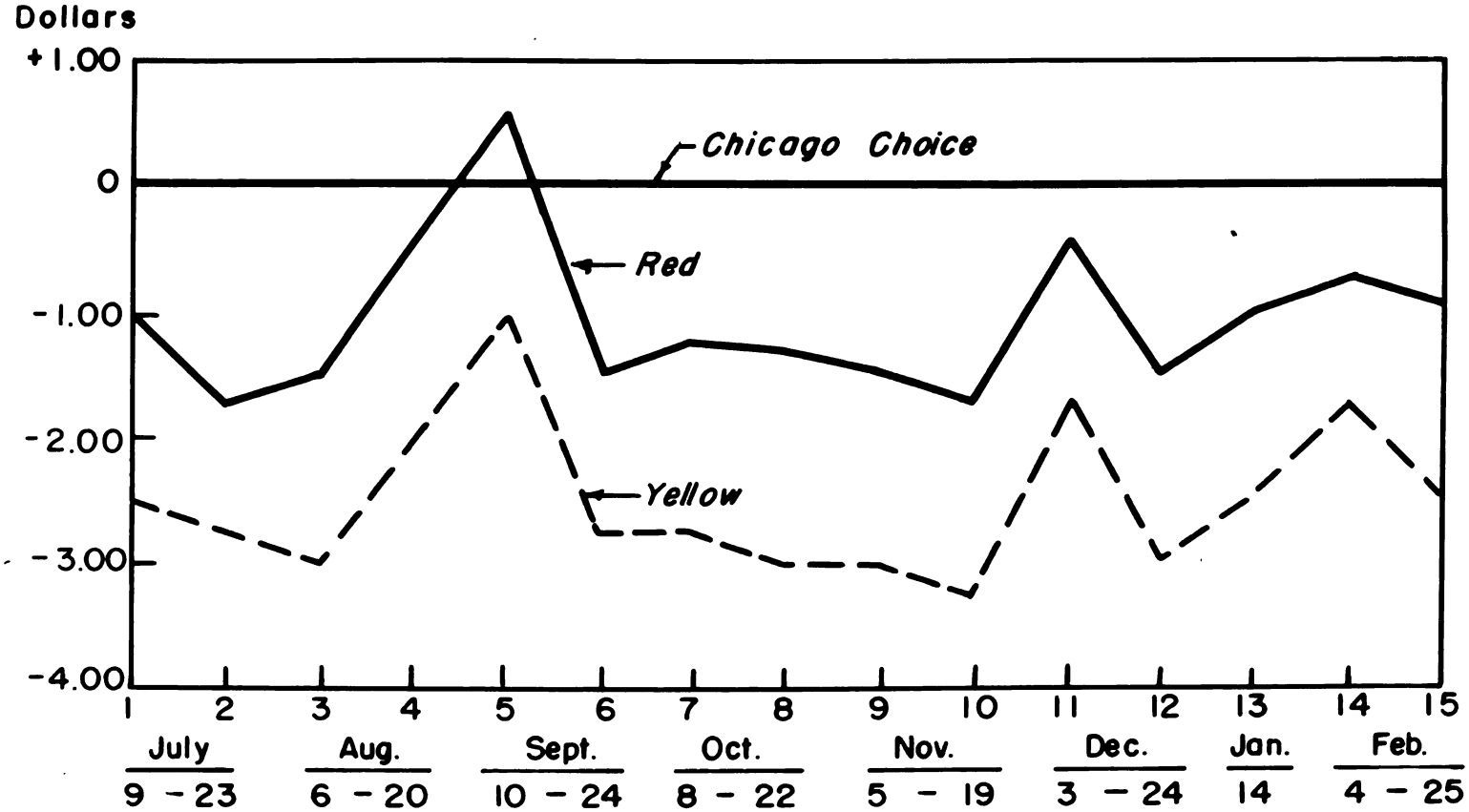

FIGURE 9

Double Blue and Single Blue Prices per Hundredweight by Pool
Compared with Top Prime Prices at Chicago
1954-55 Wilmington

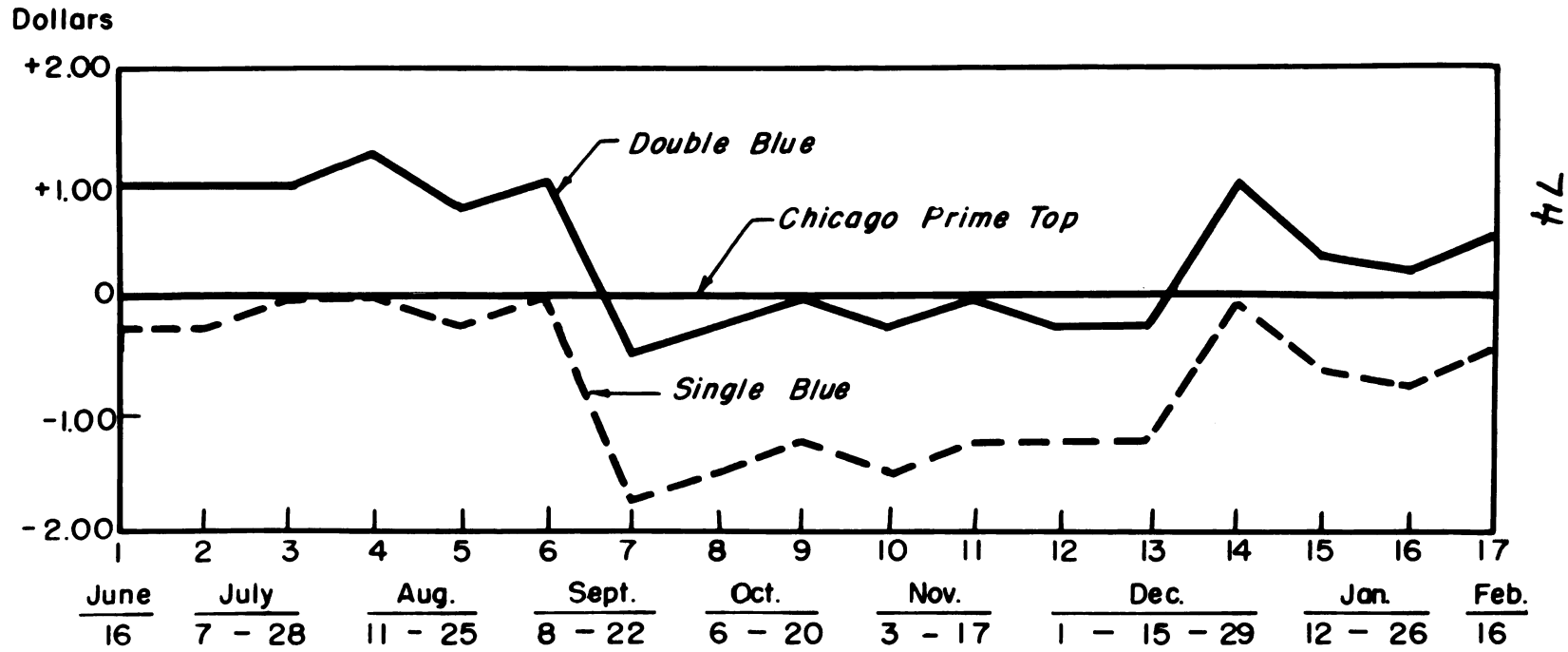

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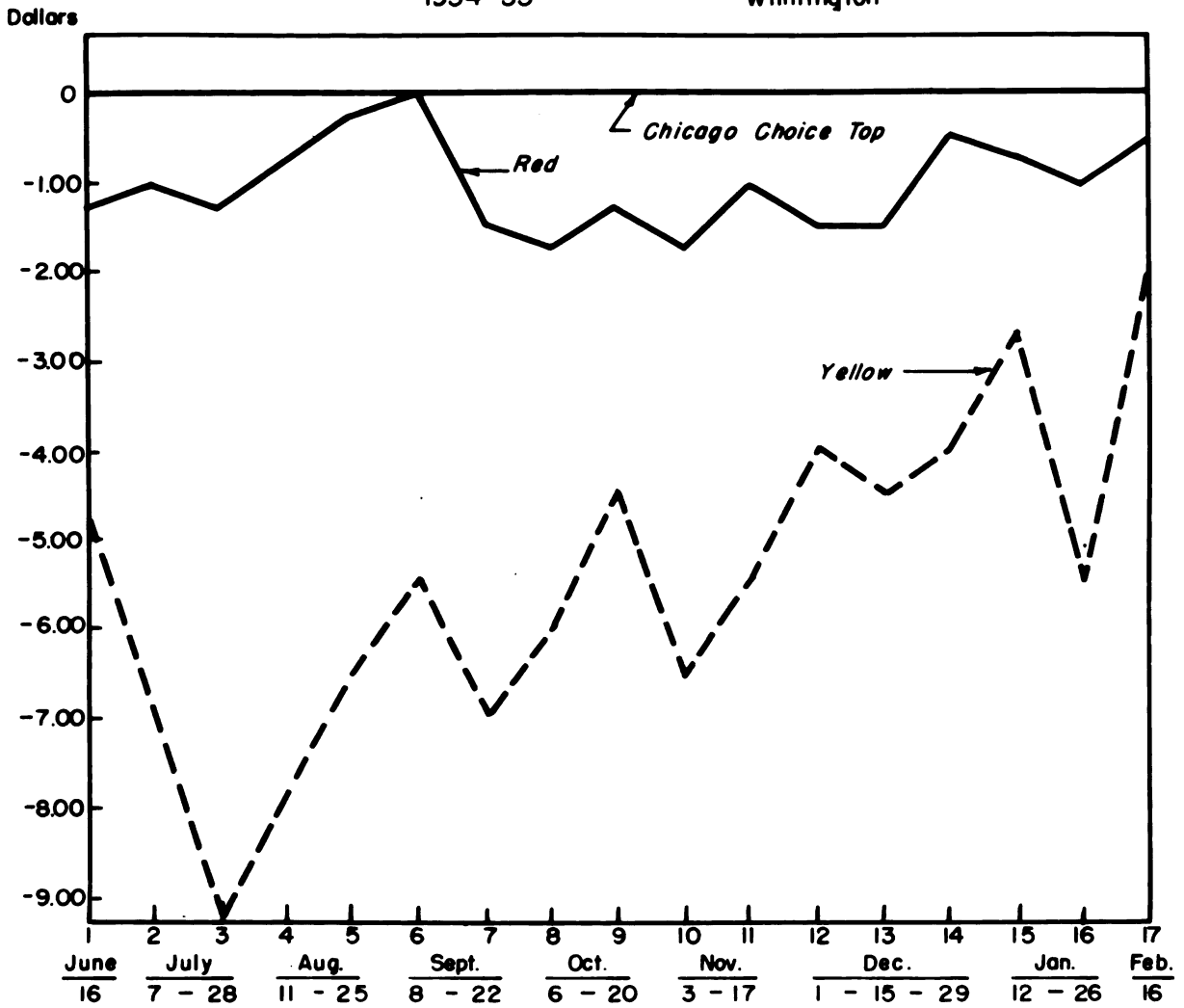
FIGURE 10

Red and Yellow Prices per Hundredweight by Pool Compared with Top Choice Prices at Chicago

1954-55 Wilmington



Clipping Native Lambs

There has not been the interest for clipping native Ohio lambs in areas such as Wilmington, where 62.1 percent of all the lambs consigned have been marketed in the early seasonal periods, June through September. In London, on a five year average, forty-five percent of all lambs were similarly marketed.

Variation in number of clipped lambs by pool. Clinton County sheepmen consigned an average of 340 clipped lambs during the 1954-1958 marketing years, the London area 621, and Marysville 1161. There was an increasing number of clipped lambs consigned to the Marysville pool during the period. The need for clipping lambs shows up in the Lancaster and Ashley areas where only thirty-five percent of the year's total lambs were consigned during June through September.

Clipped lambs have graded higher. A higher percentage of the clipped lambs has graded in the two top blue grades. In the Ashley area an average of 72.8 percent of the clipped lambs were graded Double and Single Blue grades. An average of 61.7 percent of the wool lambs in Ashley were graded in the Double and Single Blue wool grades, Table 22. In the Lancaster pools 78.2 percent of the clipped lambs have graded in the two top grades. An average of 52.7 percent of the Lancaster wool lambs were graded in the Blue grades. There data indicate that in the Lancaster area there have been a 25.5 percent higher number of clipped lambs grading Double and Single Blue than wooled lambs.

Clipped lamb weights. In the Ashley area the clipped lambs consigned through the pool averaged an annual 2.5 pounds heavier than the similar grades of wool lambs for the 1954-1958 period. During the 1958 season the clipped lambs consigned averaged 1.4 pounds heavier than the wool lambs,

Table 22. During the same period, the Lancaster clipped lambs averaged 3.4 pounds heavier than similar wool grades. During the 1958 season the clipped lambs averaged 5.4 pounds heavier than the wool lambs.

Clipped lamb prices. The 1958 clipped lambs were discounted more per hundredweight than in 1954, 1955, 1956, or 1957. The 1958 average range between all clipped lambs and wool lambs, consigned through the Lancaster pool, was $1.18 per hundredweight. The clipped lambs averaged $19.46, and the wool grades averaged $20.64, Table 24. The average price spread for the 1958 lambs at Ashley showed that the clipped grades averaged $1.47 below the wool grades.

The average five year price spread per hundredweight of wool and clipped lambs consigned through the Ashley pool was $1.05. The wool grade lambs average $20.09, and clipped grade lambs averaged $19.04 for the 1954-1958 period. The clipped lambs at Lancaster averaged $0.80 per hundredweight below the wool grades consigned, during the 1954-1958 period.

Clipped lambs returns per head. The average annual value received per head for all of the Ashley wool lambs consigned during the 1954-1958 period, has been $0.46 per head higher than the clipped lambs. In the Lancaster area the average annual returns per head were $0.10 higher for the clipped lambs consigned through the pool.

In 1958 the clipped lambs at Ashley returned $17.37 per head for all grades, and the wool lambs averaged $18.33 per head, Table 23. During the 1958 marketing year the clipped lambs consigned through the Lancaster pool averaged $17.54, and the wool lambs averaged $17.50 per head.

These data would indicate that any market dollar increase received for clipping lambs has come about because a higher percentage of clipped lambs were graded Double Blue and Single Blue.

TABLE 22

LANCASTER LAMB POOL AREA
COMPARISON OF WOOL LAMBS AND CLIPPED LAMBS
FOUR YEAR PERIOD

	1955-56		1956-57		1957-58		1958-59	
Total Wool Lambs	9509		8526		9269		9579	
Total Clipped Lambs	2208		1916		2956		2033	
Av. Price Wool Lambs	$19.14		19.17		20.86		20.64	
Av. Price Clipped Lambs	$18.15		18.98		20.61		19.46	
	Wool	Clips	Wool	Clips	Wool	Clips	Wool	Clips
% of Blue Lambs	51.6	76.2	52.8	77.0	53.6	76.2	55.1	83.2
% of Red Lambs	20.8	10.8	16.7	11.7	14.2	11.9	12.4	9.1
% of Yellow Lambs	4.2	8.3	3.8	3.4	5.1	2.6	4.7	2.4
% of Buck Lambs	5.8	1.7	6.0	3.0	6.9	2.2	5.8	0.4
% of Feeders	15.3	1.0	20.1	.0	16.2	3.6	18.3	1.1
% of All Others	2.3	2.0	1.1	4.9	4.0	3.5	3.7	3.8

ASHLEY LAMB POOL AREA
COMPARISON OF WOOL LAMBS AND CLIPPED LAMBS
FOUR YEAR PERIOD

	1955-56		1956-57		1957-58		1958-59	
Total Wool Lambs	4175		4545		2693		2892	
Total Clipped Lambs	2740		1775		2360		2085	
Av. Price Wool Lambs	$19.03		19.93		21.30		21.36	
Av. Price Clipped Lambs	$18.16		18.35		20.86		19.89	
	Wool	Clips	Wool	Clips	Wool	Clips	Wool	Clips
% of Blue Lambs	68.3	78.8	61.8	64.2	58.4	67.6	58.3	80.6
% of Red Lambs	19.1	10.9	20.8	13.2	18.5	7.6	23.9	13.0
% of Yellow Lambs	5.4	4.6	7.3	6.4	8.4	11.4	4.9	2.4
% of Buck Lambs	3.2	2.7	2.9	.8	4.1	4.9	4.3	.9
% of All Others	4.0	3.0	7.2	15.4	10.6	10.5	8.6	3.1

TABLE 23

1958 ASHLEY LAMB POOL AREA COMPARISON OF WOOL LAMBS AND CLIPPED LAMBS BY GRADE, AVERAGE WEIGHT, AVERAGE PRICE PER HUNDREDWEIGHT AND VALUE PER HEAD

Grades	Wool Lambs No. Head	Price Per Cwt	Average Weight	% of Total	Price Per Head
Double Blue	506	$23.36	92.0	17.5	$21.50
Single Blue	1,096	22.04	89.4	37.9	19.71
Reds	692	20.77	82.9	23.9	17.22
Yellows	141	19.43	76.7	4.9	14.91
Heavy Blue	83	19.66	109.2	2.9	21.47
Buck Lambs	124	19.39	87.5	4.3	16.96
Feeder Lambs	184	18.19	65.8	6.3	11.96
Common and Cull	66	12.47	52.8	2.3	6.58
Total Wool Natives	2,892	21.36	85.9	100.	18.33

Grades	Clipped Lambs No. Head	Price Per Cwt	Average Weight	% of Total	Price Per Head
Double Blue	393	20.97	92.5	18.8	$19.41
Single Blue	1,239	20.23	88.1	59.3	17.82
Reds	272	18.42	79.7	13.0	14.67
Yellows	47	16.56	69.4	2.4	11.48
Heavy Blues	52	18.71	113.6	2.5	21.25
Buck Lambs	18	17.91	89.7	.9	16.07
Feeder Lambs	54	14.80	66.8	2.6	9.88
Common and Cull	10	9.98	53.5	.5	5.34
Clipps	2,085	19.89	87.3	100.	17.37

TABLE 24

1958 LANCASTER LAMB POOL AREA COMPARISON OF WOOL LAMBS AND CLIPPED LAMBS BY GRADE, AVERAGE WEIGHT, AVERAGE PRICE PER HUNDREDWEIGHT AND VALUE PER HEAD

Grades	Wool Lambs No. Head	Price Per Cwt.	Average Weight	% of Total	Price Per Head
Double Blues	1559	23.10	95.6	16.3	22.09
Single Blues	3511	21.59	90.9	36.7	19.63
Reds	1192	20.03	81.3	12.4	16.28
Yellows	451	19.13	76.3	4.7	14.60
Heavies	207	19.43	113.9	2.1	22.12
Bucks	557	18.27	85.6	5.8	15.63
Feeders	1751	18.77	66.8	18.3	12.53
Common and Cull	104	8.46	49.9	1.1	4.22
Total Wool Natives	9570	20.64	84.7	100.	17.50

Grades	Clipped Lambs No. Head	Price Per Cwt	Average Weight	% of Total	Price Per Head
Double Blue	675	20.49	94.1	33.2	19.27
Single Blue	1016	19.40	90.3	50.0	17.53
Reds	186	17.60	78.9	9.1	13.88
Yellows	48	15.65	71.6	2.4	11.20
Heavies	53	18.88	111.4	2.6	21.03
Bucks	8	15.71	86.3	.4	13.55
Feeders	23	17.79	71.1	1.1	12.65
Common and Cull	2	7.50	55.0	.1	4.13
Total Clipped	2033	19.46	90.1	100.	17.54

Ram Distribution Programs

Purebred mutton-type ram programs were one of the major activities of the County Sheep Improvement Committees, who sponsored lamb pool programs. No one method of procurement of purebred rams has been accepted as the most desirable.

During the 1954-1958 years the Clinton County (Wilmington) Committee cooperated with the Producers Marketing Agency to sponsor two ram and ewe auctions and breeders from Ohio were invited to consign rams.

The Marysville and Ashley sheepmen have ordered their breeding rams through the Producers Marketing Association fieldmen or purchased from purebred breeders.

Since 1941 the Madison County Sheep Improvement Committee has had a standing sub-committee called the Ram Committee. During these eighteen years the committee has purchased 743 purebred rams for Madison County sheepmen, Table 25. The ram purchasing and distribution program followed by the Madison County Sheep and Lamb Improvement Association has been one of the keys to the high quality and uniformity of the lambs produced in the London pool area.

Starting in 1942 the association decided to send a committee to buy rams. These rams were to be distributed at a central point on a given day. All sheepmen in the county were given an opportunity to order purebred rams. The purchased rams were graded by the committee and priced by grade lots at the ram distribution day. The rams have carried a purebred breeders guarantee.

One advantage of the Madison County ram activities has been that a greater control over the mutton qualities of the rams were maintained.

The lamb graders have been able to accomplish a more uniform and consistent job of grading over the seasons, when there has been uniformity in the types of lambs consigned. Note, Table 25, that ninety-six percent of the rams distributed by Madison County were of the Shropshire and Southdown type.

The Clinton County auction type program during 1954-1958 period has not permitted as much control over the quality of rams and type of rams best suited for the individual sheepman's program. The auction method of selling purebred rams has met with an increase in sheepmen's approval and a greater number of rams were distributed per year.

TABLE 25

MADISON COUNTY COMMITTEE RAM DISTRIBUTION PROGRAM

BY BREEDS 1941-1958

Year	P. B. Shropshire	P. B. Southdown	Other	Total
1941-53	406	157	18	581
1954	22	12	2	36
1955	13	9	0	22
1956	13	15	4	32
1957	12	26	3	41
1958	11	18	2	31
Total to Date	477	237	29	743

Effects of the Production and Marketing Improvement through Pool Programs

Pool programs have offered opportunities and much interest for production improvement. Local leaders, educational and marketing workers have cooperated to get problems solved concerning the effects of internal parasites in lambs.

Opportunities offered for effective internal parasite control. Sheepmen marketing lambs through these five pools had to meet kosher standards to receive the top prices for lambs. Lambs with nodular parasites were rejected. This rejection has meant as high as $1.50 per hundred live-weight in pool lambs. Lamb pneumonia and lung adhesions have contributed to kosher rejection.

The Ohio Extension Service, the Experiment Station and Swift and Company have cooperated with sheep committeemen to have flock owners' lambs killed separately in order to study the effects of flock management on kosher acceptance.

Sanger (1959) reported that research men at the Ohio Agricultural Experiment Station have made two important observations regarding disease problems in slaughter lambs. One was that intestinal parasites were no longer the major problem in Ohio sheep flocks, especially if the flocks were treated regularly. The other was that pneumonia problems were a major cause of lamb ill health, as well as a cause of financial loss, due to downgrading at the slaughter house.

Producers Eastern Order Buying Company and the Ohio Extension Service have been informed concerning lamb pools meeting kosher acceptance.

Table 26 presents data provided through the courtesy of Swift and Company. At certain times of the year the Eastern Order Buying Company has reported that counties with a history of low kosher acceptance have received a lower price quotation. This has depended upon the supply of kosher lamb meat available. This information has been used to decide whether lambs were shipped to Massachusetts or to New York City. Certain Ohio counties have shown a consistent lower percentage of lambs with kosher acceptance.

Effects of improvement program on lambs saved. Accurate data by counties was not available to show the lambs saved and lambs marketed by counties for the years which the sheep improvement programs were started by counties. The Census data for Ohio has showed that during 1947-1956 years, Ohio saved an average of 765,000 lambs. Similar data shown for the years 1957 and 1958 were 829,000 and 854,000 head. The lambs saved, as percentage of ewes one year old and older, for January 1 has been: 95 percent for 1947-1956 years; 101 percent for 1957; and 101 percent for 1958 as reported by the Agricultural Marketing Service (1959).

TABLE 26

ONE DAY KOSHER AND TRAEFA LAMB REPORT

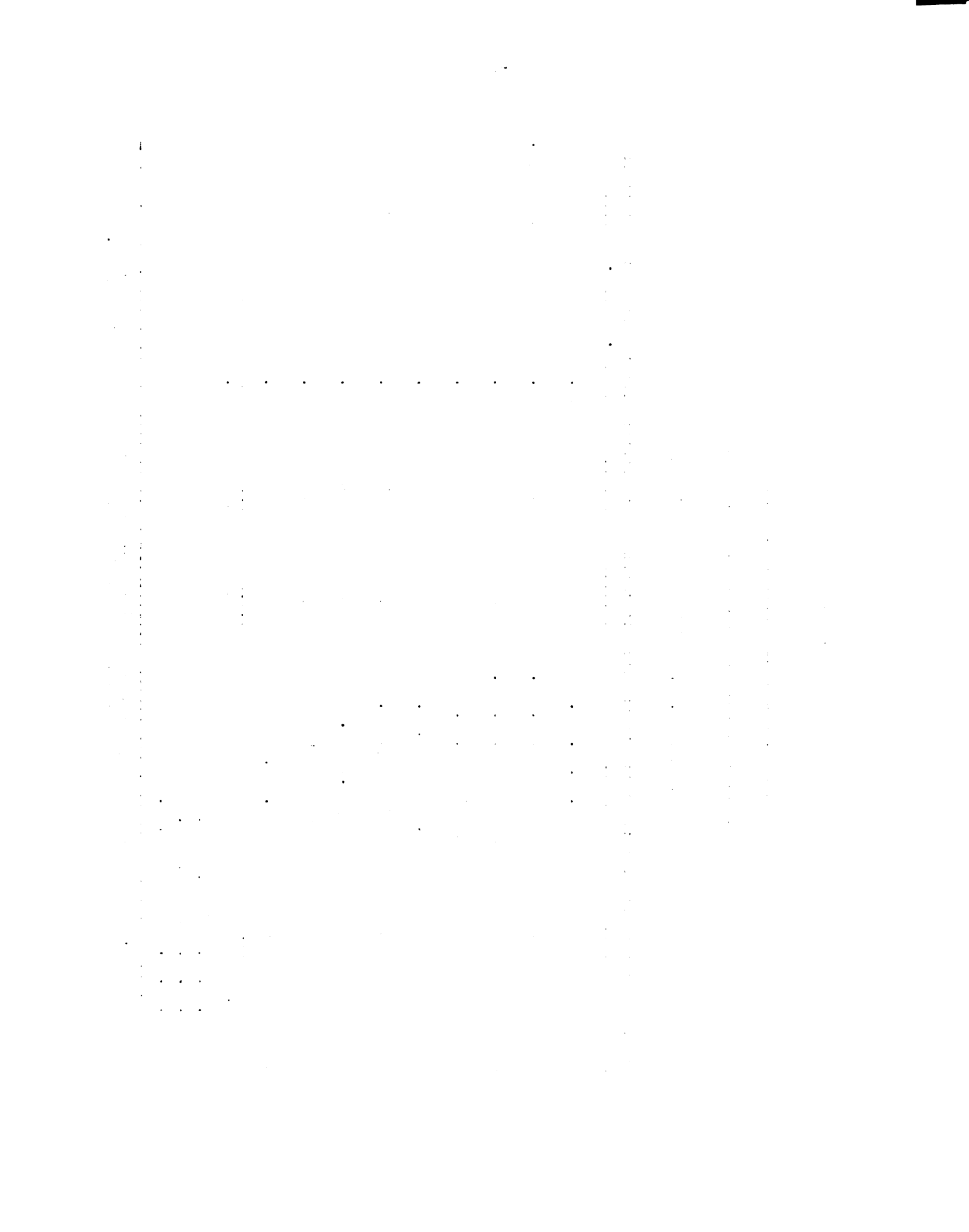
OF LAMBS KILLED IN NEW YORK CITY BY ORIGIN

McCAREY, J. K. SWIFT AND COMPANY, 1954

Lots	Kill	Origin	Kosher	Traefa	% Kosh.	Cond.	Remarks
9	115	Wash. C. H., O.	84	31	73.0		
15	355	Petersburg, W. Va.	220	134	62.0	1	*nod cags.
15	355	Petersburg, W. Va.	259	96	73.0		
18	228	Wilmington, O.	148	80	64.9		" "
10	246	U. Sandusky, O.	115	131	46.7		" "
17	247	Louisville, Ky.	170	77	68.8		" "
20	212	Indpls., Ind.	148	64	69.8		" "
21	123	" "	91	32	74.0		
19	244	Cenn., L.	168	76	68.9		adh lungs
Total No.	2125		1403	721	66.0%	1	

cc: Mr. R. B. Stiven, Chgo.
Mr. F. K. McCarey, Col.
Mr. W. C. McArthur, N. Y.

*Nod Cags. has referred to lambs rejected for kosher meat because of the presence of nodules produced in the wall of the intestine of the lambs as results of the nodular worm larval.



VI. SUMMARY AND CONCLUSIONS

A total of five Ohio lamb pool programs were studied for the five year period, 1954-1958 and were compared with the first five operating periods of each pool.

Lamb pool reports were used as the main source of data, and visitations were made at all of the pools during the five years by the author. Interested sheepmen of a county or area have made improvements in production practices and marketing methods. A sheep improvement committee plan of organization was used in the lamb pool programs.

Participating parties in the county improvement committees included sheepmen , Extension Service, Producers Marketing Agencies, packers, public carriers, and sheep shearers. Group action was the dominant force behind the operative procedures.

It may have appeared to some that lamb pools have been simply another method of marketing lambs. Other marketing agencies have not considered the pool system of marketing because of the educational improvement expenses involved, as compared to auctions of ungraded lambs or direct marketing.

Under the conditions of this study, the following trends are indicated:

1. A volume of quality lambs is important for effective pricing and marketing.

2. Sheepmen's income will increase when carcasses of lambs marketed meet consumer preference, and when the market services reflect these carcass values of lambs in prices paid the producers for live lambs.

3. The grading phase of marketing without production improvement will not insure a change in the quality or volume of lambs.

4. Rigid grading of lambs is not desired by all sheepmen.

5. The auction method of selling has an increasing appeal to the producers. The county sheep improvement committees operating closed pools will need to consider the auction method of pricing pool lambs.

6. The closed pool method of pricing lambs is not suitable to encourage small killers of lambs to enter the buying competition.

7. Marketing agencies will need to consider the marketing of lambs in co-mingled lots by grade and cooperate with sheep improvement committees in production improvements in order to help insure a volume of quality lambs for effective marketing.

8. The auction method of selling lambs will not insure higher lamb prices, more competition, or lower marketing expenses when the volume and quality of lambs are not available.

9. Committee group action is the dominant force which will bring about improvement in production practices and marketing methods.

Based on the results and discussion presented, the following general conclusions as to the evident effectiveness of the lamb pool programs may be drawn:

1. The volume of quality pool lambs has been such as to contribute to effective marketing.

2. Timely "topping-out" of lambs has been encouraged.

3. The pool method of marketing has been an immediate incentive for sheepmen to continue lamb production improvement activities.

4. Pool programs have resulted in experienced, trained lamb graders for grading, pricing and field work.

5. The lamb pool programs have enabled the Extension specialists to devote more time helping county improvement committees and county agents with program planning and preparation of teaching material.

6. The lamb pool program has enabled county agents and Extension Specialists to more easily evaluate the success of their programs and teaching methods.

7. Pool programs have offered opportunities for development of local leadership.

8. An increased interest and development of Animal Science Extension programs resulted when the Sheep Improvement Program began to function.

9. The pool program has encouraged sheepmen to market an increasingly

higher percentage of quality lambs which has increased average returns per head.

10. The pool program has encouraged an increasing number of lambs to be marketed in the June-July seasonal period. The price variation has been $3.67 to $5.87 per seasonal period, while the annual price variation has been $1.98 during the five years.

11. Pool programs have encouraged a more uniform standard method of live lamb grading.

12. Pool graded lambs have been very favorably priced with comparable top choice and Prime live lambs at Chicago.

13. The pool lambs have maintained a very uniform price spread between grades.

14. Pool programs have definitely decreased the percentage of feeder lambs marketed and increased the percentage of clipped lambs.

15. Pool programs have encouraged more effective internal parasite control and other production practices.

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VIII. APPENDIX

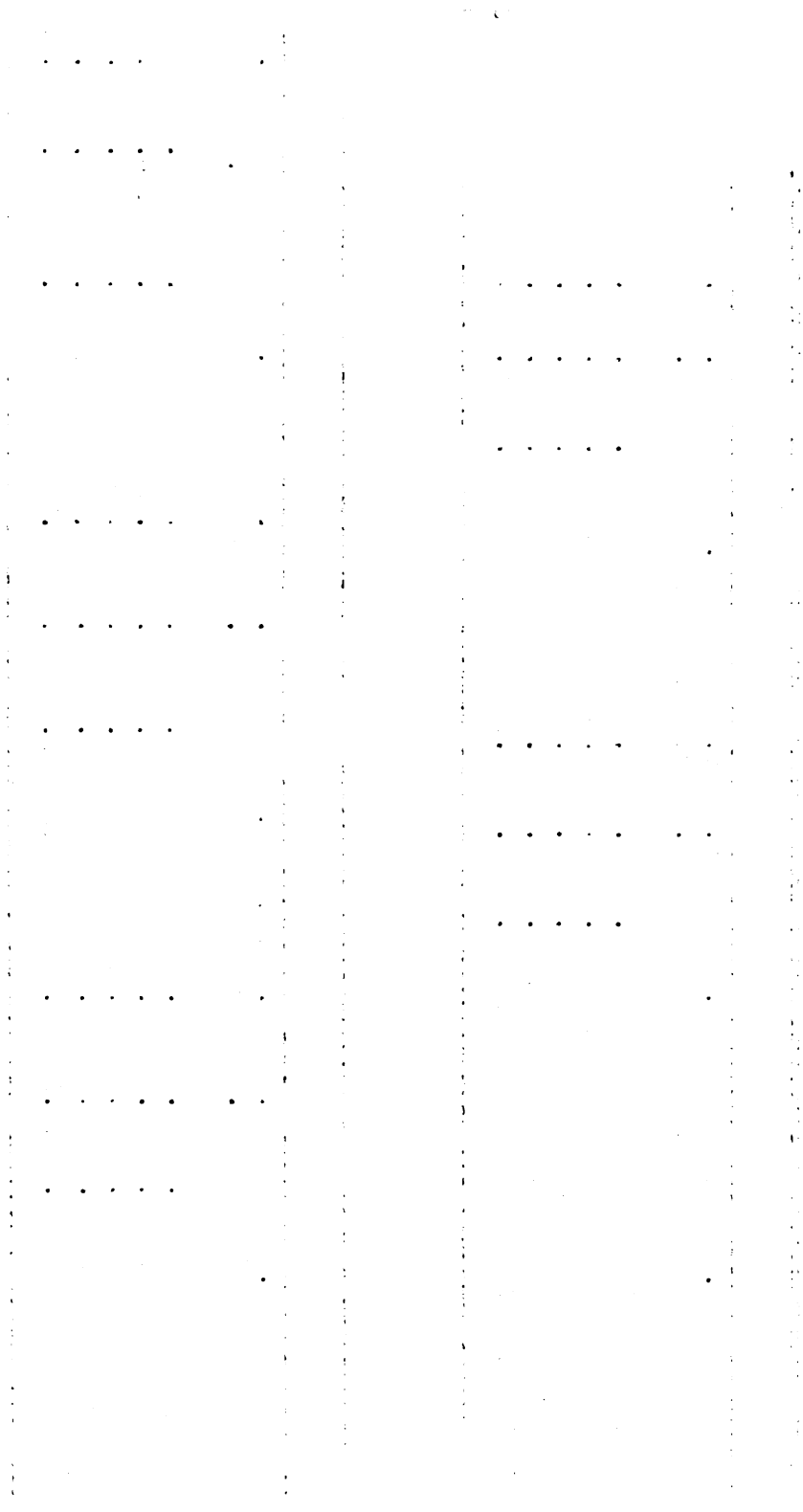
APPENDIX A

APPENDIX A

1954-1955 LAMB POOL SUMMARY--WOOLS

	For Year			Double Blue				Single Blue			
	No.of Pools	Pool Total	Total Wools	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av. Price Per Cwt
Ashley	16	7300	5268	1003	19.4	92.8	21.44	2252	43.7	91.7	20.50
Lancaster	23	15739	13492	2904	23.7	90.2	22.03	3227	26.3	85.9	20.72
London	17	9445	9166	1513	17.3	90.8	22.38	3344	38.33	87.2	21.22
Marysville	16	5704	5149	697	14.13	92.7	21.43	2016	41.2	88.9	20.32
Wilmington	17	10741	10403	3280	34.4	91.1	21.77	3433	36.0	85.0	20.62

	Red				Yellow				Link Blue			
	No.of Head	% of Total	Av. Wt.	Av. Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av Wt.	Av.Price Per Cwt
Ashley	939	18.3	84.1	19.25	262	5.1	75.7	17.48	146	2.8	112.3	20.65
Lancaster	2477	20.2	78.3	19.05	174	1.4	71.5	17.33	178	1.5	114.6	19.90
London	1823	20.9	80.1	19.53	805	9.2	73.1	17.93	58	0.7	113.3	20.31
Marysville	1203	24.6	81.5	19.09	394	8.1	73.5	17.43	97	2.0	112.1	19.65
Wilmington	1388	14.5	78.1	18.86	275	2.9	69.9	15.32	112	1.1	112.4	19.57



APPENDIX A Continued

	Bucks				Feeders				Common Cull			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt
Ashley	237	4.6	88.5	17.68	244	4.8	66.8	16.03	65	1.3	53.8	11.20
Lancaster	635	5.2	82.0	16.46	2402	19.6	68.0	16.08	269	2.1	59.0	9.59
London	466	5.3	81.0	17.76	570	6.5	66.1	16.57	156	1.8	62.1	12.10
Marysville	247	5.1	84.8	17.95	152	3.1	66.7	16.37	82	1.6	56.5	11.93
Wilmington	357	3.7	89.1	17.65	595	6.2	59.6	16.01	86	1.0	59.1	9.81

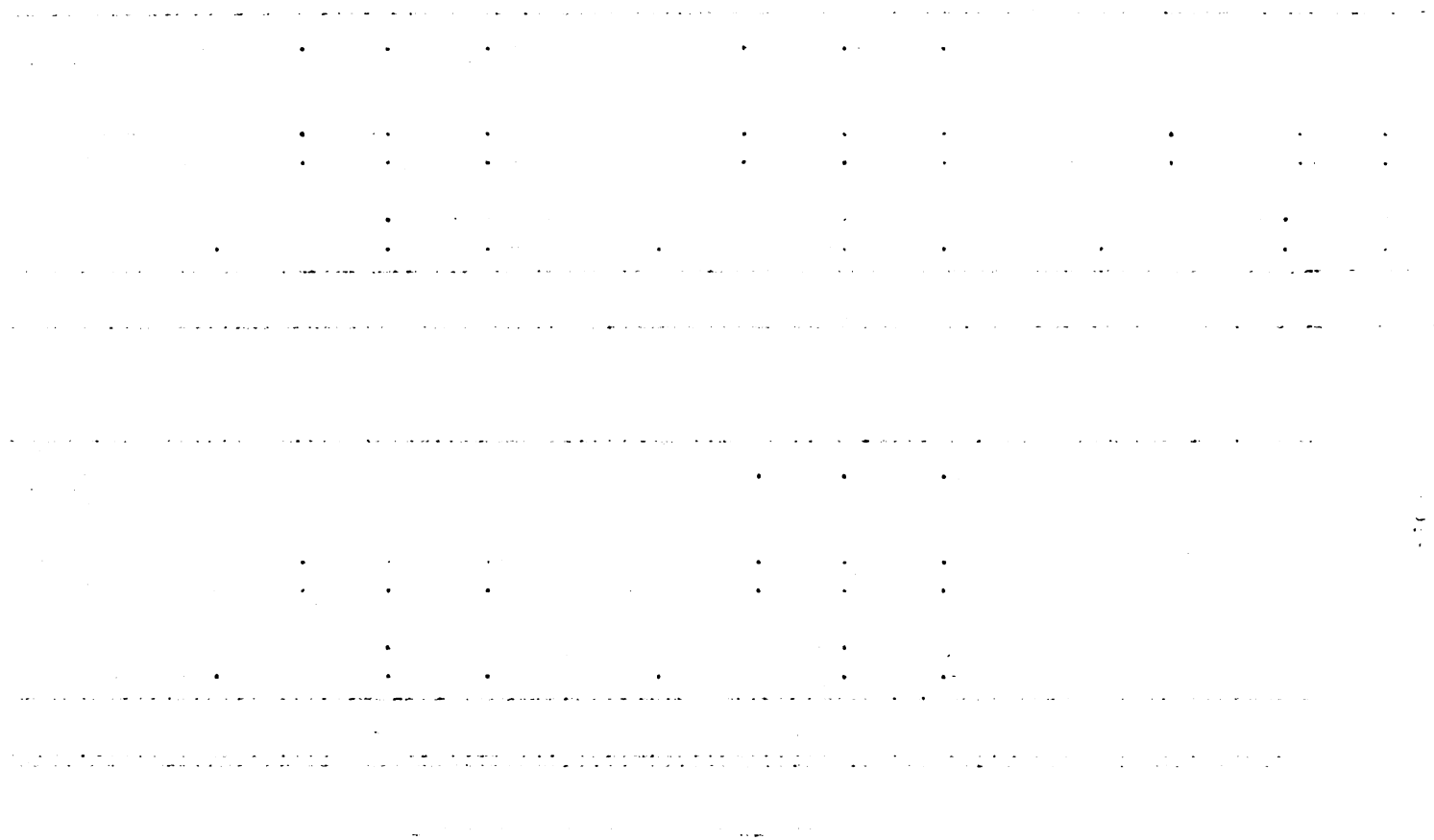
APPENDIX B

APPENDIX B

1954-1955 LAMB POOL SUMMARY--CLIPS

	Double Blue				Single Blue				For Year
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	Pool Total
Ashley	605	29.8	94.0	21.25	712	35.0	90.0	20.18	2032
Lancaster	1094	48.7	91.3	20.92	578	25.7	86.3	19.78	2247
London									279
Marysville									555
Wilmington					251	74.7	83.7	19.15	338

	Red				Yellow				Link Blue			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt
Ashley	312	15.4	84.7	18.77	115	5.7	78.0	17.25	111	5.5	112.7	19.69
Lancaster	286	12.7	77.7	18.43	58	2.5	64.1	16.12	125	5.5	107.5	19.05
London												
Marysville												
Wilmington	78	23.2	86.0	17.39	7	2.1	60.7	12.80				



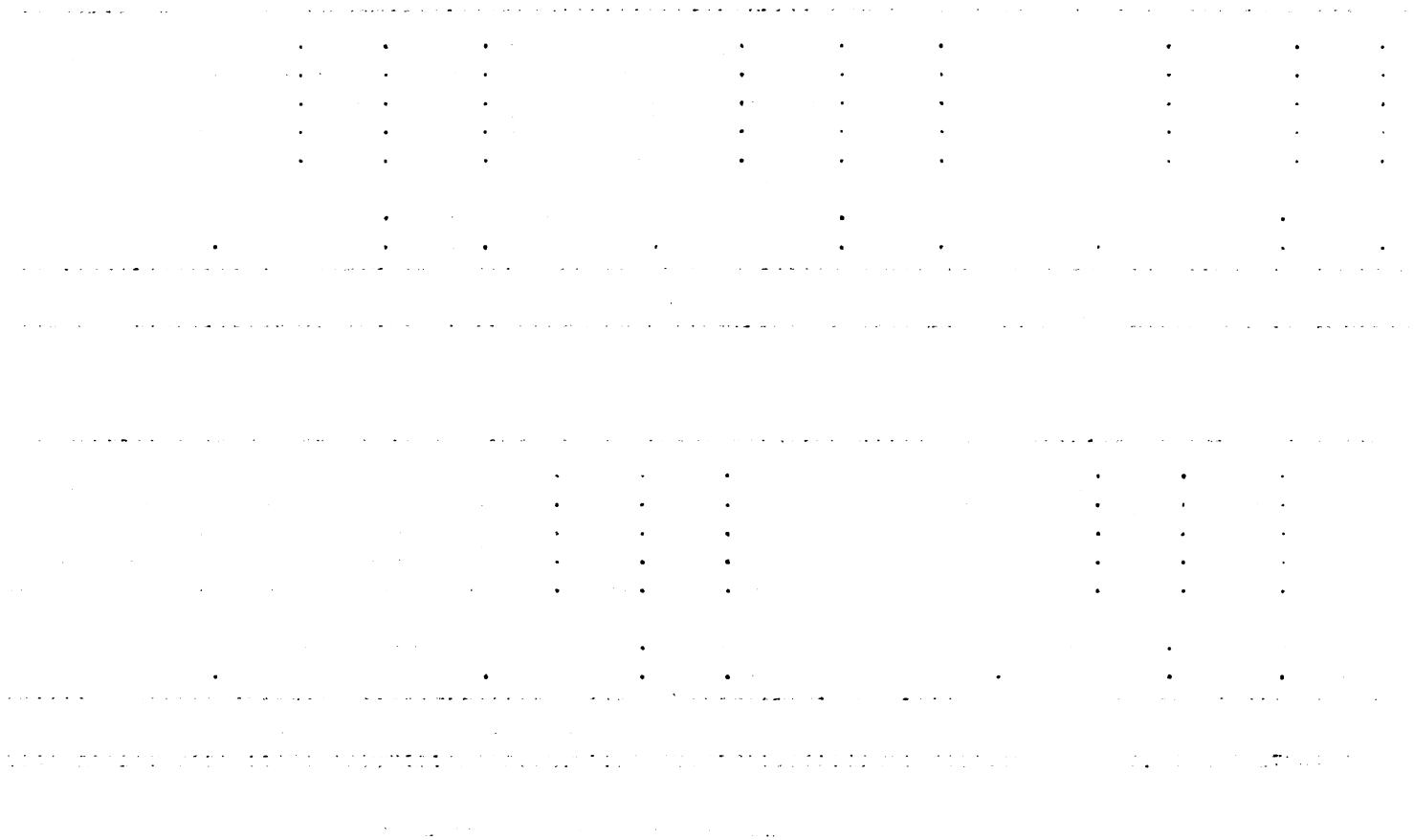
APPENDIX C

APPENDIX C

1955-1956 LAMB POOL SUMMARY--WOOLS

	For Year			Double Blue				Single Blue			
	No.of Pools	Pool Total	Total Wools	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt
Ashley	17	7129	4175	758	18.1	93.3	20.31	1827	43.8	89.6	19.50
Lancaster	22	12181	9509	1568	16.5	92.2	21.10	3050	32.1	89.0	20.14
London	17	9296	8167	1479	18.1	90.8	21.03	3354	41.1	86.8	20.24
Marysville	16	5832	5072	1039	20.5	93.0	20.44	2158	42.5	89.4	19.63
Wilmington	19	11105	9632	2003	20.8	90.1	21.38	3629	37.7	87.5	20.63

	Red				Yellow				Link Blue			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Pr PerCwt
Ashley	796	19.1	82.1	18.37	224	5.4	73.6	17.27	268	6.4	113.2	17.2
Lancaster	1981	20.8	82.0	19.17	402	4.2	73.6	17.14	288	3.0	113.6	18.36
London	1702	20.8	79.0	19.01	663	8.1	70.0	17.29	205	2.5	110.9	18.23
Marysville	874	17.2	80.6	18.85	268	5.3	71.9	17.16	195	3.9	112.4	18.27
Wilmington	1908	19.8	82.7	19.23	512	5.3	76.5	17.06	471	4.9	109.3	18.91



APPENDIX C Continued

APPENDIX C Continued

	Bucks				Feeders				Common-Cull			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	AvPrice PerCwt
Ashley	136	3.2	88.0	17.98	104	2.5	64.7	16.02	62	1.5	55.7	12.02
Lancaster	554	5.8	85.7	17.06	1452	15.3	66.1	16.45	84	.9	43.2	5.69
London	285	3.4	82.0	17.71	327	4.0	63.5	15.85	150	1.8	52.7	11.07
Marysville	184	3.6	88.3	17.72	297	5.9	65.5	16.38	57	1.1	59.6	11.64
Wilmington	426	4.4	88.8	17.03	551	5.7	63.6	15.33	82	.9	54.2	13.27

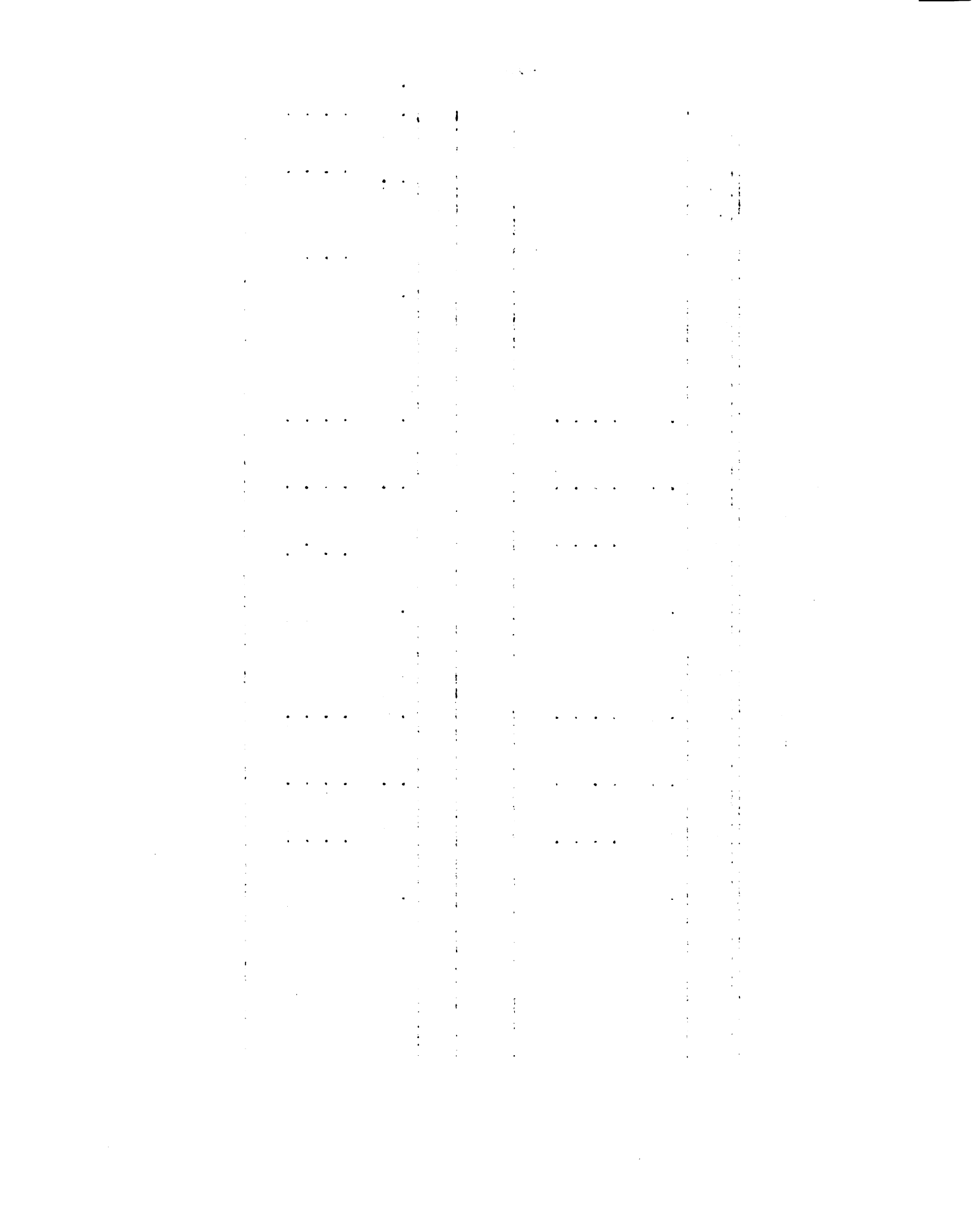
APPENDIX D

APPENDIX D

1955-1956 LAMB POOL SUMMARY--CLIPS

	Double Blue				Single Blue				Total Head
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	
Ashley	852	31.1	93.2	19.15	1127	41.1	90.3	18.40	2740
Lancaster	826	37.4	91.7	19.66	812	36.8	88.1	18.85	2208
London	94	15.3	87.4	19.14	165	26.8	79.9	18.74	615
Marysville	174	32.6	88.9	19.47	184	34.5	85.3	18.74	534
Wilmington									112

	Red				Yellow				Heavies			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Pr. PerCwt
Ashley	300	10.9	85.3	17.07	125	4.6	77.8	15.62	181	6.6	111.1	17.70
Lancaster	238	10.8	77.3	17.97	183	8.3	70.3	14.94	44	2.0	112.7	15.20
London	100	16.3	75.6	18.02	78	12.2	68.1	16.65	13	2.1	100.0	17.75
Marysville	68	12.7	69.8	17.59	15	2.8	60.3	16.62	6	1.1	108.3	18.25
Wilmington												

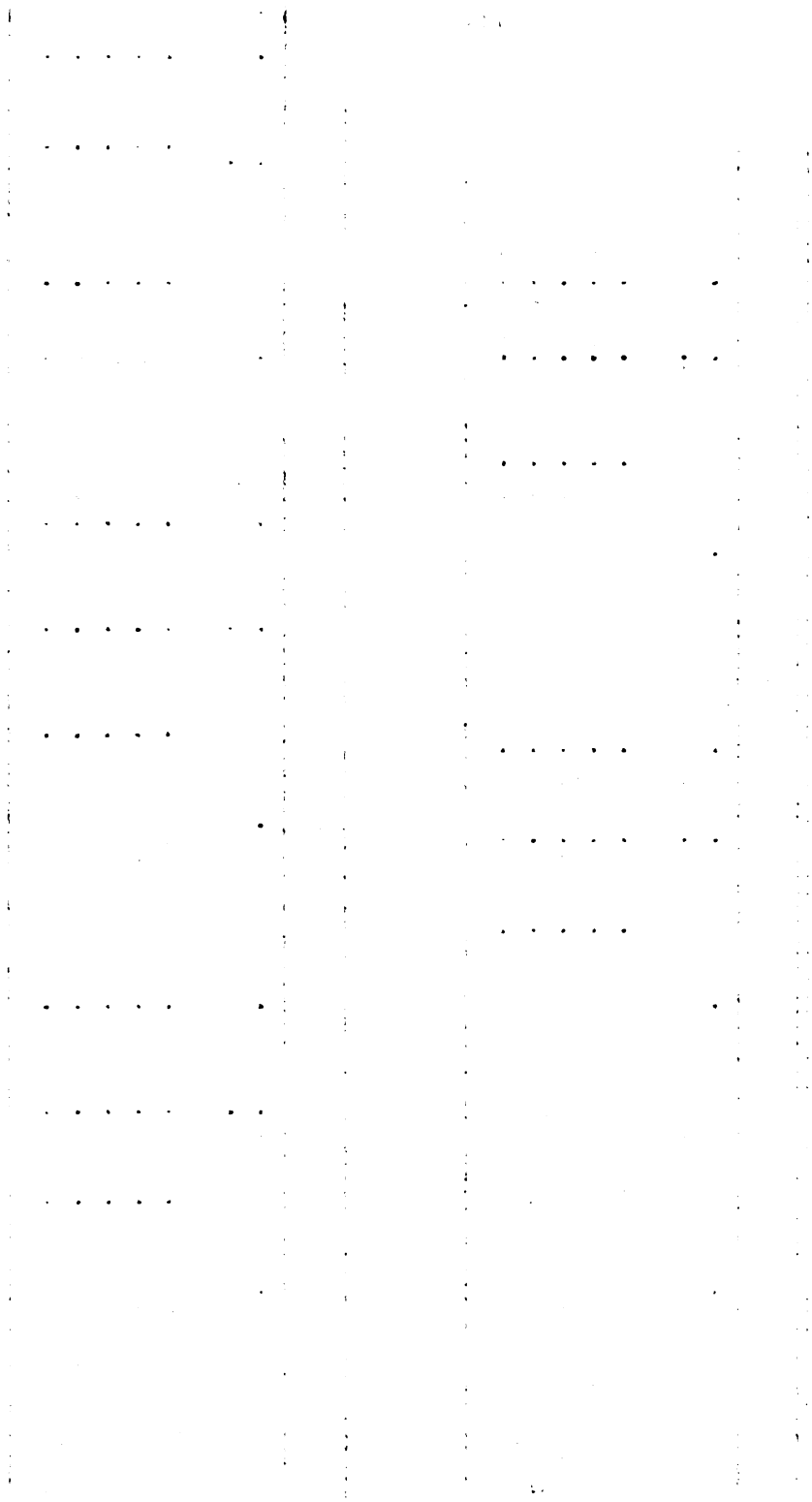


APPENDIX E

1956-1957 LAMB POOL SUMMARY--WOOLS

	For Year			Double Blue				Single Blue			
	No.of Pools	Pool Total	Total Wools	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt
Ashley	17	6563	4545	776	17.1	93.0	21.70	1935	42.5	91.0	20.62
Lancaster	22	10595	8256	1492	18.0	94.0	21.90	2682	32.5	89.0	20.97
London	17	10082	7930	1468	18.5	91.2	21.93	3013	38.0	86.2	21.10
Marysville	15	5490	4234	688	16.3	93.3	21.62	1583	37.4	89.6	20.65
Wilmington	20	10747	9603	2432	25.3	90.9	21.65	3446	35.9	86.5	21.09

	Red				Yellow				Link Blue			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Pr. PerCwt
Ashley	946	20.8	85.8	19.34	331	7.3	75.5	17.54	101	2.2	111.4	19.31
Lancaster	1378	16.7	82.0	19.47	313	3.8	74.0	17.40	146	1.8	118.0	19.31
London	1586	20.0	80.8	19.63	607	7.7	73.5	17.36	149	1.9	110.3	19.30
Marysville	1054	24.9	83.3	19.40	397	9.4	75.5	17.33	107	2.5	113.2	19.08
Wilmington	1844	19.2	82.3	19.68	591	6.2	77.7	17.21	127	1.8	112.6	18.07



APPENDIX E--Continued

	Bucks				Feeders				Common-Cull			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Pr. PerCwt
Ashley	131	2.9	93.4	18.57	237	5.0	68.3	15.51	98	2.2	57.2	10.95
Lancaster	488	6.0	87.0	17.44	1666	20.1	66.0	16.43	65	.8	47.0	8.84
London	381	4.8	85.1	20.13	310	3.9	67.6	16.19	202	2.5	61.1	11.73
Marysville	99	2.3	66.5	17.73	202	4.8	68.7	16.55	104	2.5	57.5	12.33
Wilmington	311	3.2	95.0	17.59	697	7.3	65.5	15.95	67	.7	64.3	9.94

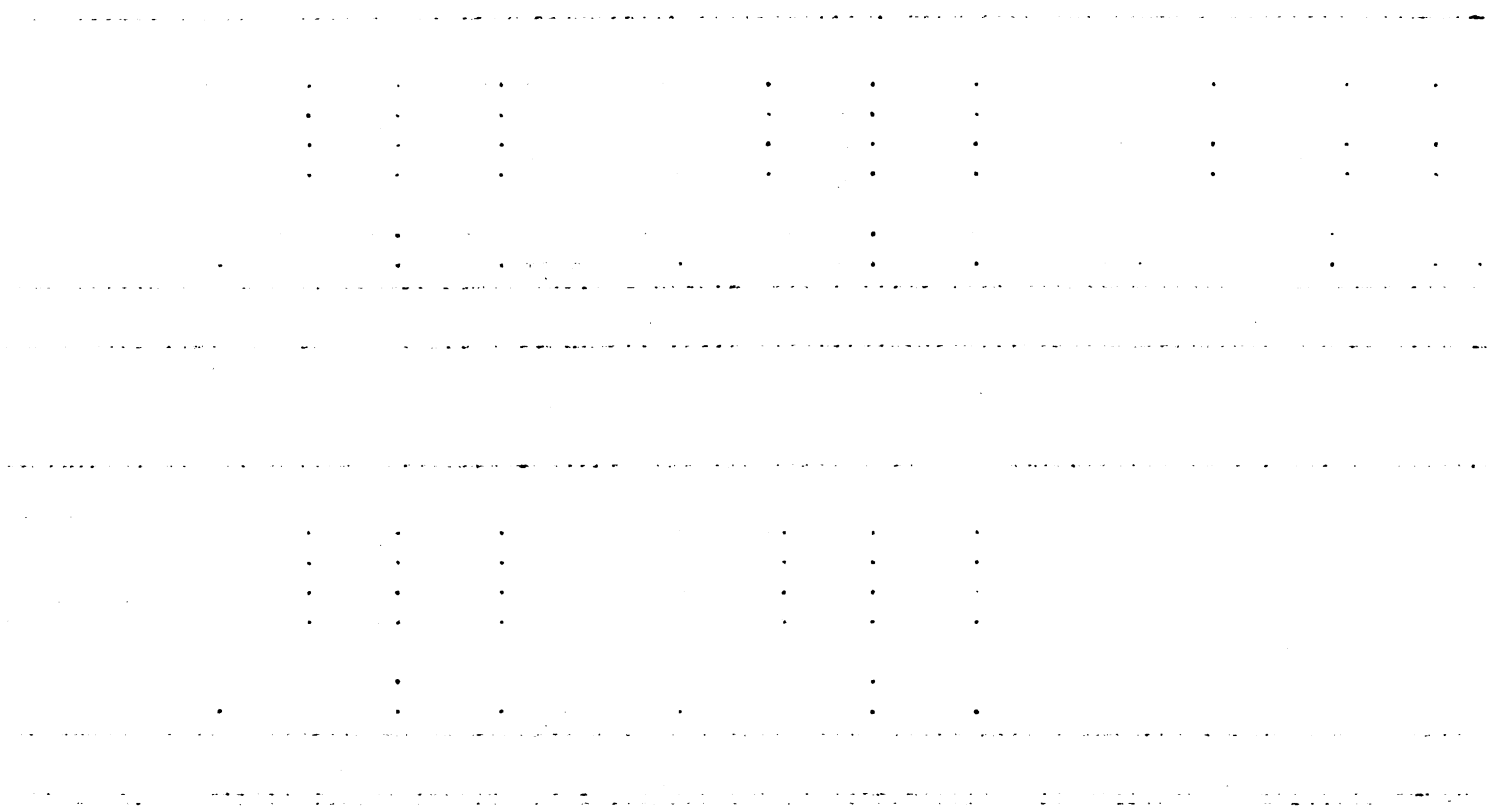
APPENDIX F

APPENDIX F

1956-1957 LAMB POOL SUMMARY--CLIPS

	Double Blue				Single Blue				Clips Total
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	
Ashley	390	20.8	93.7	20.20	681	38.4	89.8	19.12	1775
Lancaster	699	36.5	94.1	20.02	774	40.4	86.1	19.03	1916
London	196	18.0	95.8	19.65	349	32.1	87.0	18.93	1088
Marysville	354	35.0	93.3	20.36	479	47.4	88.9	18.76	1010
Wilmington									280

	Red				Yellow				Link Blue			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Pr. PerCwt
Ashley	234	13.2	82.8	18.39	113	6.4	77.6	16.72	89	5.0	109.9	18.79
Lancaster	224	11.7	76.4	17.95	64	3.3	69.0	15.21	2	.1	122.5	20.50
London	268	24.6	73.2	16.96	7	.6	72.1	16.55				
Marysville	90	8.9	80.3	17.93	31	3.1	66.6	16.35	31	3.1	120.7	17.66
Wilmington												



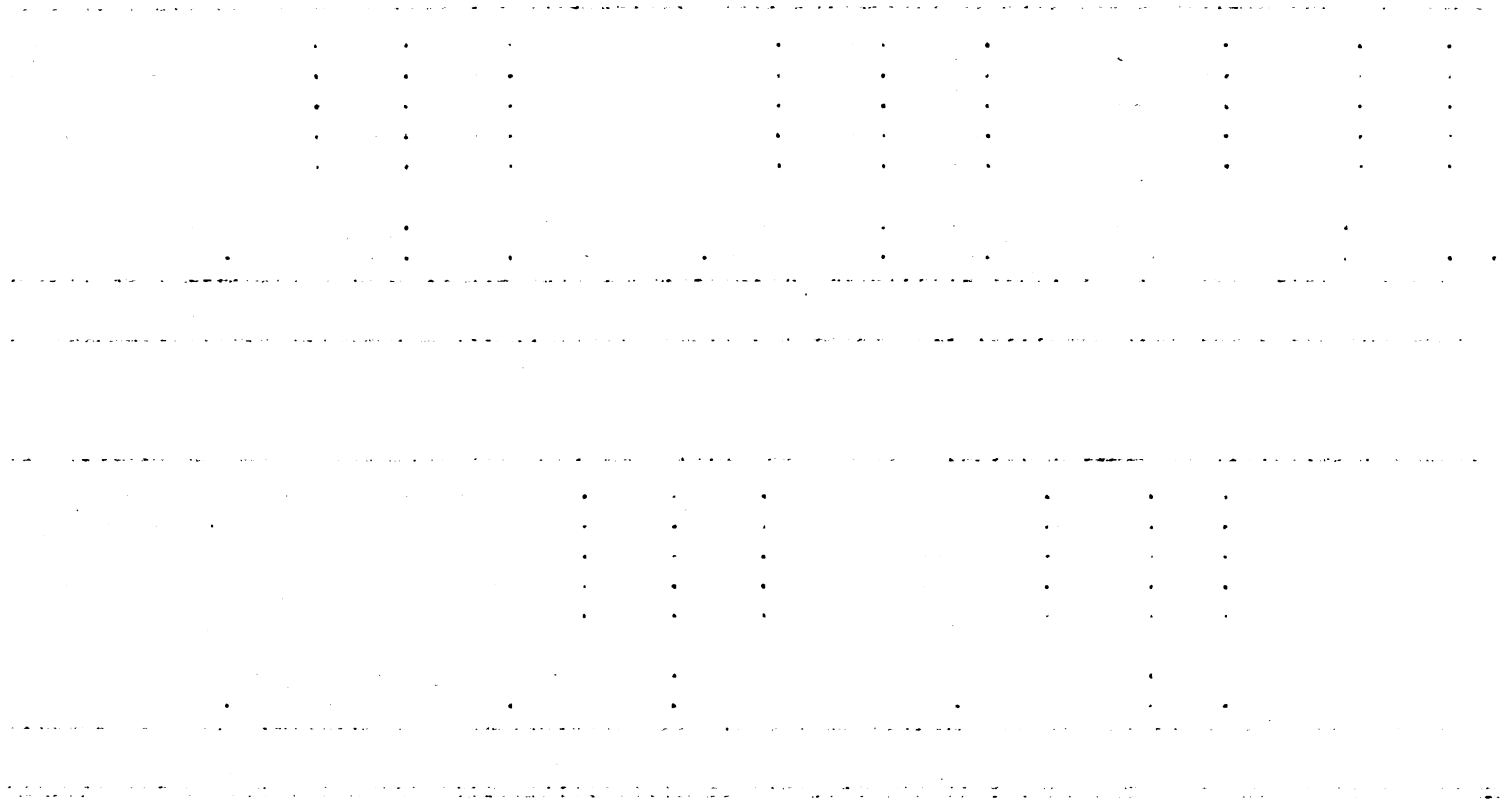
APPENDIX G

APPENDIX G

1957-1958 LAMB POOL SUMMARY

	For Year			Double Blue				Single Blue			
	No.of Pools	Pool Total	Total Wools	No.of Head	% of Total	Av. Wt.	AvPrice PerCwt	No.of Head	% of Total	Av. Wt.	Av.Price PerCwt
Ashley	17	5336	2693	449	16.7	92.5	23.36	1095	40.7	89.0	22.31
Lancaster	22	13240	9269	1733	18.7	93.6	23.17	3117	33.6	87.7	22.16
London	19	8640	7609	1250	16.4	92.2	23.43	3332	43.8	87.3	22.43
Marysville	17	6476	3807	550	14.4	94.0	23.26	1264	33.2	89.4	22.14
Wilmington	13	7460	5378	1726	32.0	89.3	22.93	2021	38.0	85.3	21.86

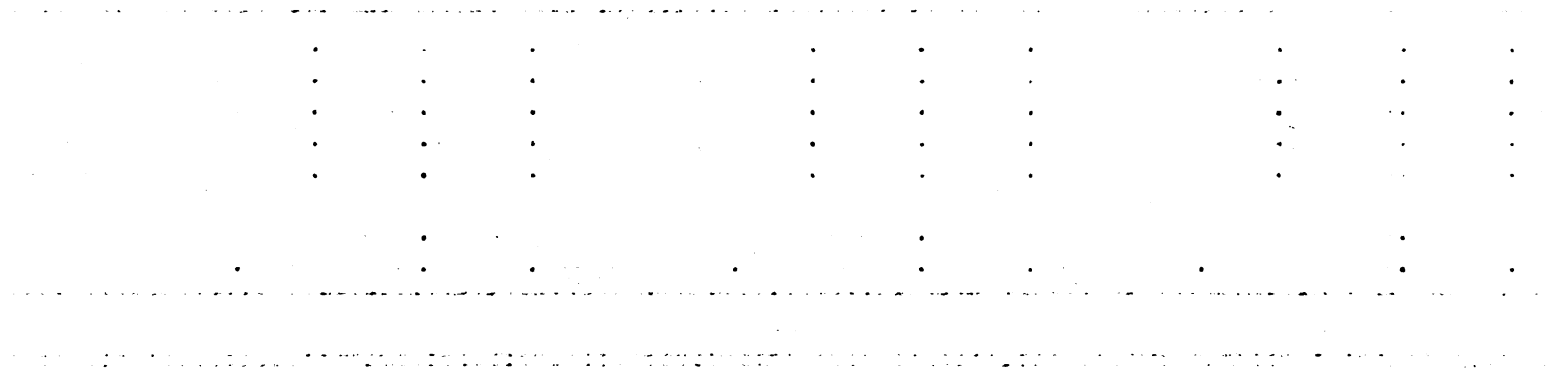
	Red				Yellow				Link Blue			
	No.of Head	% of Total	Av. Wt.	Av.Price PerCwt	No.of Head	% of Total	Av. Wt.	Av.Price PerCwt	No.of Head	% of Total	Av. Wt.	Av.Pr. PerCwt
Ashley	498	18.5	83.5	20.89	227	8.4	75.8	18.80	27	1.0	120.7	21.37
Lancaster	1320	14.2	78.4	20.44	472	5.1	73.0	19.21	121	1.3	112.3	20.44
London	1349	17.7	79.0	20.92	562	7.4	72.0	19.08	13	.2	110.7	21.99
Marysville	978	25.7	81.8	20.84	368	9.7	75.3	18.65	48	1.3	117.7	22.68
Wilmington	781	14.0	80.9	20.61	77	1.0	76.2	18.00	97	2.0	110.6	20.83



APPENDIX G-Continued

APPENDIX G-Continued

	Bucks				Feeders				Common-Cull			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Pr. PerCwt
Ashley	110	4.1	81.2	18.12	221	8.2	67.6	17.20	66	2.4	54.2	11.93
Lancaster	635	6.9	83.7	18.30	1498	16.2	63.2	17.56	176	1.9	51.7	9.08
London	377	5.0	78.7	18.84	516	6.8	66.7	17.63	210	2.7	53.9	12.71
Marysville	134	3.5	83.3	18.65	397	10.4	67.0	17.40	68	1.8	54.0	12.52
Wilmington	169	3.0	87.2	19.20	439	8.0	65.9	18.04	15	1.0	51.0	6.58

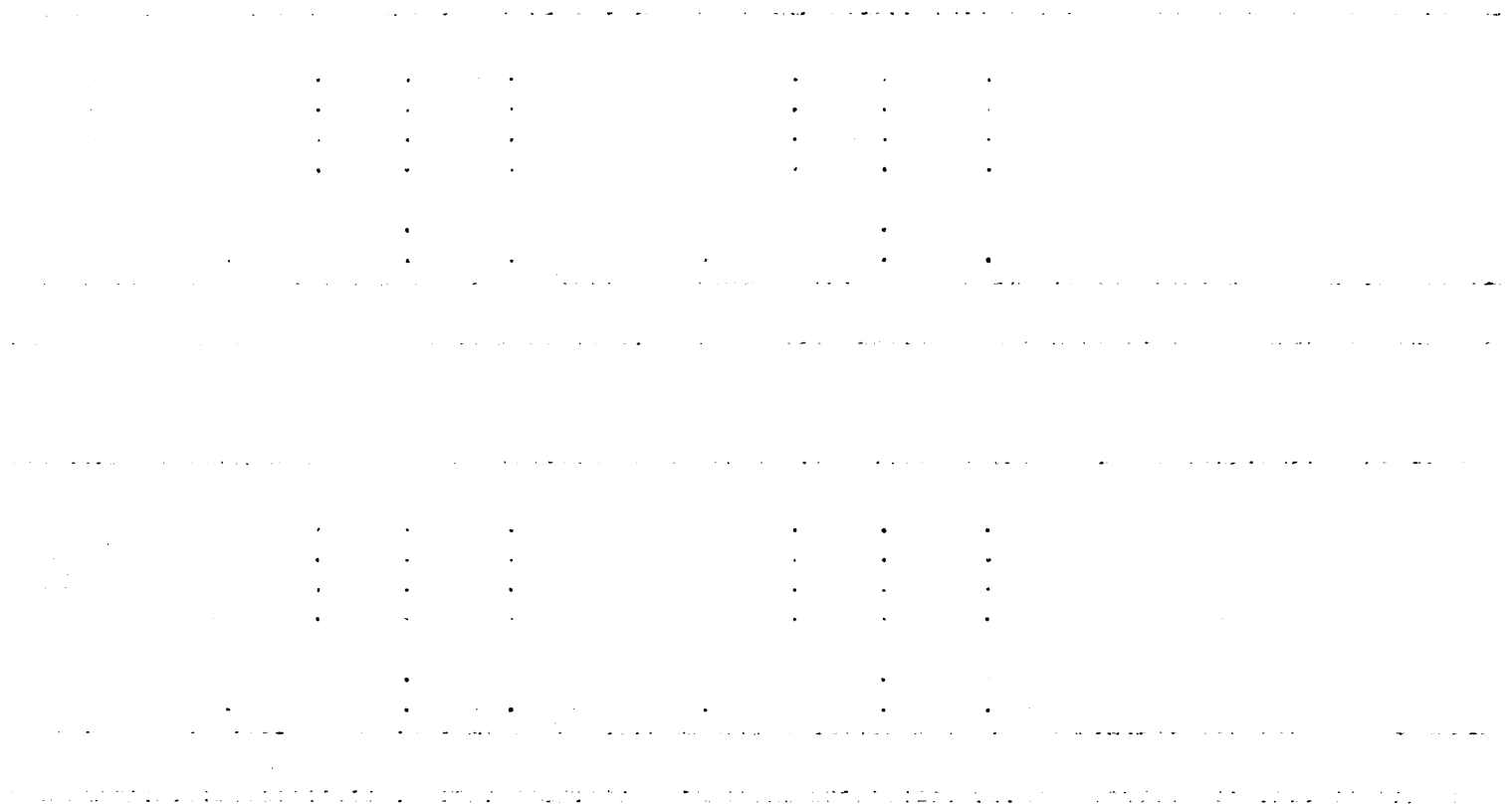


APPENDIX H

1957-1958 LAMB POOL SUMMARY CLIPS

	Double Blue				Single Blue				Total Head
	No.of Head	% of Total	Av. Wt.	Av.Price PerCwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	
Ashley	678	28.7	95.0	22.71	903	38.3	87.7	21.53	2360
Lancaster	1024	34.7	93.4	22.18	1225	41.5	87.7	20.80	2956
London	110	22.6	91.1	22.78	287	59.1	88.0	22.03	486
Marysville	761	31.6	90.9	22.43	858	35.6	86.6	21.54	2412
Wilmington									781

	Red				Yellow			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt
Ashley	180	7.6	75.9	20.66	268	11.4	76.7	18.99
Lancaster	333	11.3	76.9	18.33	78	2.6	70.5	16.52
London	49	10.1	79.0	20.75	18	3.7	69.7	19.87
Marysville	362	15.0	80.4	20.39	40	1.7	73.7	18.04
Wilmington								



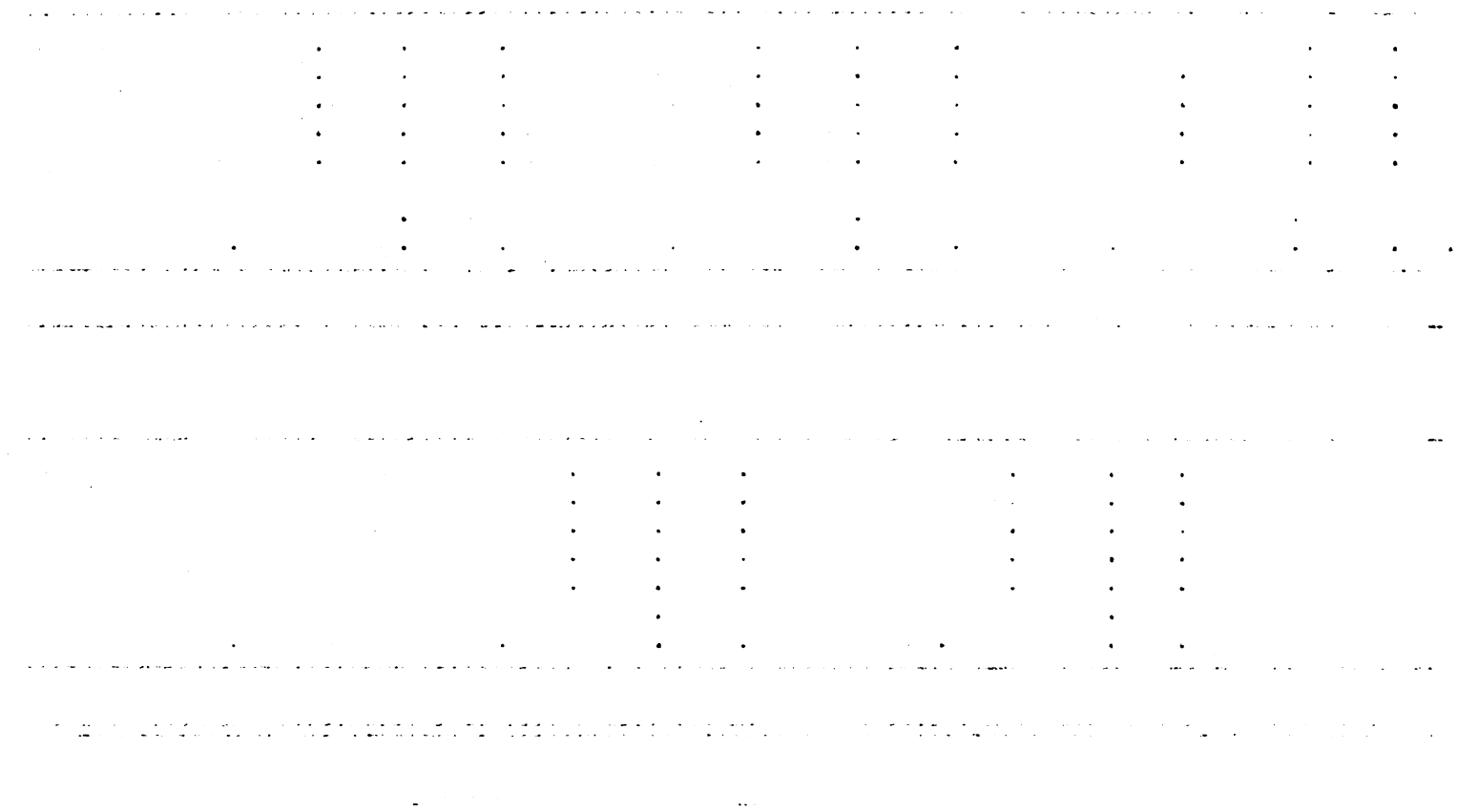
APPENDIX I

APPENDIX I

1958-1959 LAMB POOL SUMMARY--WOOLS

	For Year			Double Blue				Single Blue			
	No.of Pools	Pool Total	Total Wools	No.of Head	% of Total	Av. Wt.	Av.Price PerCwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt
Ashley	17	5244	2892	506	17.5	92.0	23.36	1096	37.9	89.4	22.04
Lancaster	22	12276	9579	1559	16.3	95.6	23.1	3511	36.7	90.9	21.59
London	20	8681	7568	1201	15.9	91.0	23.40	2901	38.3	87.1	22.30
Marysville	16	4641	3078	384	12.5	93.1	22.96	964	31.3	89.9	21.97
Wilmington	13	3027	2524	906	35.9	90.4	23.19	782	31.0	86.5	22.23

	Red				Yellow				Link Blue			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av. Pr. PerCwt
Ashley	692	23.9	82.9	20.77	141	4.9	76.7	19.43	83	2.9	109.2	19.66
Lancaster	1192	12.4	81.3	20.03	451	4.7	76.3	19.13	207	2.1	113.9	19.43
London	1792	23.7	80.4	20.90	547	7.2	71.4	19.87	18	.2	112.8	21.25
Marysville	762	24.8	80.8	20.55	492	16.0	73.7	19.31	51	1.6	109.8	20.02
Wilmington	350	13.9	81.3	21.01	43	1.7	74.2	18.46	2		112.5	22.25



APPENDIX I--Continued

APPENDIX I--Continued

	Bucks				Feeders				Common-Cull			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Pr. PerCwt
Ashley	124	4.3	87.5	19.39	184	6.4	65.8	18.19	66	2.2	52.8	12.47
Lancaster	557	5.8	85.6	18.27	1751	18.3	66.8	18.77	104	1.1	49.9	8.46
London	197	2.6	79.2	19.35	686	9.1	67.9	18.74	223	3.0	55.6	12.48
Marysville	88	2.9	88.5	19.61	267	8.6	63.9	17.96	70	2.3	54.4	12.87
Wilmington	153	6.1	90.4	20.26	237	9.4	68,3	18.66	27	1.0	58.5	9.28

APPENDIX J

APPENDIX J

1958-1959 LAMB POOL SUMMARY--CLIPS

	Double Blue				Single Blue				Total Head
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	
Ashley	393	18.8	92.5	20.97	1239	59.3	88.1	20.23	2085
Lancaster	675	33.2	94.1	20.49	1016	50.0	90.3	19.40	2033
London	215	33.7	93.3	20.69	146	22.9	94.2	19.81	638
Marysville	295	22.7	93.7	21.33	520	40.1	88.9	20.13	1297
Wilmington									189

	Red				Yellow			
	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt	No.of Head	% of Total	Av. Wt.	Av.Price Per Cwt
Ashley	272	13.0	79.7	18.42	47	2.4	69.4	16.56
Lancaster	186	9.1	78.9	17.60	48	2.4	71.6	15.65
London	81	12.7	74.3	19.28	14	2.2	66.8	18.05
Marysville	225	17.3	78.8	18.97	63	4.9	67.5	16.86
Wilmington								

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APPENDIX K

MARYSVILLE
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR FIRST TWO TOP GRADES
PRICE PER HUNDREDWEIGHT AND PER HEAD--1954-1955

Month	Double Blue No.	Double Blue Av. Wt.	Double Blue Per Cwt	Double Blue Per Head	Single Blue No.	Single Blue Av. Wt.	Single Blue Per Cwt	Single Blue Per Head
July								
(1) 9	47	92.8	24.50	22.73	90	85.2	23.50	20.03
(2) 23	18	95.6	21.75	20.78	49	87.4	20.75	18.15
August								
(3) 6	52	92.5	20.50	18.96	95	86.2	19.50	16.80
(4) 20	53	89.1	21.50	19.15	105	84.5	20.50	17.32
September								
(5) 10	82	89.3	22.00	19.65	244	85.2	21.00	17.90
(6) 24	70	93.4	20.00	18.67	177	89.9	19.00	17.07
October								
(7) 8	21	91.4	20.25	18.51	110	91.1	19.25	17.54
(8) 22	46	90.4	20.50	18.54	170	84.5	19.50	16.47
November								
(9) 5	72	94.0	21.50	20.20	178	89.7	20.50	18.38
(10) 19	19	95.8	20.25	19.40	69	91.7	19.25	17.66
December								
(11) 3	85	95.0	20.50	19.48	281	91.5	19.50	17.84
(12) 24	46	93.0	21.25	19.77	149	88.1	20.25	17.84
January								
(13) 14	31	93.7	22.00	20.62	178	96.0	21.00	20.16
February								
(14) 4	32	91.3	23.00	20.99	79	90.4	22.00	19.88
(15) 25	16	110.0	23.25	23.40	38	92.8	22.25	20.64
March								
(16) 18	7	93.6	24.50	22.93	10	84.0	23.08	19.39
Total	697	92.7	21.43		2,016	88.9	20.32	

APPENDIX K

MARYSVILLE
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR RED AND YELLOW
PRICE PER HUNDRED WEIGHT AND PER HEAD--1954-1955

Month	Red				Yellow			
	No.	Av. Wt.	Per Cwt	Per Head	No.	Av. Wt.	Per Cwt	Per Head
July								
(1) 9	97	81.5	22.00	17.93	16	71.9	20.50	14.73
(2) 23	29	79.8	19.25	15.37	--	00.0	00.00	00.00
August								
(3) 6	36	82.8	18.00	14.90	5	72.0	16.50	11.88
(4) 20	38	79.0	19.00	15.18	10	72.0	17.50	12.60
September								
(5) 10	156	80.2	20.04	16.07	42	74.9	18.50	13.85
(6) 24	80	81.7	17.50	14.30	24	74.4	16.25	12.09
October								
(7) 8	76	85.0	17.75	15.09	22	75.0	16.25	12.19
(8) 22	161	79.9	18.21	14.56	65	72.2	16.50	11.19
November								
(9) 5	124	81.4	19.00	15.46	72	72.6	17.50	12.71
(10)19	44	82.3	17.75	14.60	11	75.5	16.25	12.26
December								
(11) 3	182	82.9	18.55	15.38	78	75.6	17.25	13.04
(12) 24	51	83.6	18.75	15.68	18	73.3	17.25	12.65
January								
(13) 14	55	83.8	19.75	16.55	11	73.2	18.25	13.36
February								
(14) 4	42	78.1	20.75	16.20	11	73.2	19.75	14.45
(15) 25	28	78.9	21.04	16.61	9	65.6	19.50	12.78
March								
(16) 18	4	70.0	21.50	15.05	--	00.0	00.00	00.00
Total	1,203	81.5	19.09		324	73.5	17.43	

APPENDIX K

WILMINGTON
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR RED AND YELLOW
PRICE PER HUNDREDWEIGHT AND PER HEAD--1954-1955

Month	Red				Yellow			
	No.	Av. Wt.	Per Cwt.	Per Head	No.	Av. Wt.	Per Cwt	Per Head
June								
(1) 16	27	79.6	22.50	17.92	4	68.8	19.00	13.06
July								
(2) 7	36	78.6	21.50	16.90	--	--	--	--
(3) 28	58	85.3	20.00	17.07	4	82.5	12.00	9.90
August								
(4) 11	51	78.0	20.25	15.80	--	--	--	--
(5) 25	108	81.1	19.25	15.61	5	78.0	13.00	10.14
September								
(6) 8	123	80.6	19.50	15.32	4	66.3	14.00	16.56
(7) 22	144	77.7	17.50	13.61	12	76.3	12.00	9.15
October								
(8) 6	78	73.7	17.25	12.72	4	72.5	13.00	9.43
(9) 20	102	74.9	18.25	13.66	18	63.3	15.00	9.50
November								
(10) 3	201	75.6	18.75	14.17	52	68.1	14.00	9.53
(11) 17	129	77.1	18.50	14.27	17	73.2	14.00	10.25
December								
(12) 1	128	77.7	17.50	13.59	61	70.2	15.00	10.54
(13) 15	43	77.2	17.00	13.13	17	65.6	14.00	9.18
(14) 29	40	74.1	19.50	14.45	4	63.8	16.00	10.20
January								
(15) 12	46	83.4	20.00	16.67	38	72.5	18.00	13.05
(16) 26	46	83.6	20.50	17.74	13	75.8	16.00	12.12
February								
(17) 16	28	81.6	21.25	17.34	22	65.9	19.75	13.02
Total	1,388	78.1	18.86		275	69.9	15.32	

APPENDIX L

WILMINGTON
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR FIRST TWO TOP GRADES
PRICE PER HUNDREDWEIGHT AND PER HEAD--1954-1955

Month	Double Blue				Single Blue			
	No.	Av. Wt.	Per Cwt	Per Head	No.	Av. Wt.	Per Cwt	Per Head
June								
(1) 16	115	90.8	25.50	23.15	130	84.3	24.25	20.44
July								
(2) 7	183	91.1	24.50	22.34	186	84.6	23.25	19.67
(3) 28	412	91.5	23.00	21.05	366	86.3	22.00	18.99
August								
(4) 11	206	90.0	23.25	21.05	192	84.4	22.00	18.57
(5) 25	410	89.0	22.00	19.59	327	84.8	21.00	17.81
September								
(6) 8	304	90.5	22.00	19.92	311	85.7	21.00	18.00
(7) 22	351	92.0	20.00	18.40	309	84.8	18.75	15.90
October								
(8) 6	170	89.6	19.75	17.69	184	81.1	18.50	15.00
(9) 20	345	88.8	21.00	18.48	299	84.2	19.75	16.62
November								
(10) 3	227	92.5	21.75	20.12	302	83.0	20.50	17.01
(11) 17	135	90.4	21.00	18.99	233	84.3	19.75	16.64
December								
(12) 1	261	95.4	20.00	19.08	329	87.4	19.00	16.61
(13) 15	31	89.0	19.50	17.36	72	83.3	18.50	15.42
(14) 29	46	93.4	22.00	20.54	48	88.4	21.00	18.57
January								
(15) 12	24	92.5	22.00	20.35	55	90.2	21.00	18.94
(16) 26	37	95.1	23.00	21.88	47	87.9	22.00	19.33
February								
(17) 16	23	89.3	23.25	20.77	43	89.7	22.25	19.75
Total	3,280	91.1	21.77		3,433	85.0	20.62	

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Appendix M

Ashley
Number of Lambs Marketed
Average Weight by Pool for First Two Top Grades
Price Per Hundredweight and Per Head--1954-1955

Month	Double Blue No.	Double Blue Av. Wt.	Double Blue Av.Per Cwt.	Double Blue Per Head	Single Blue No.	Single Blue Av. Wt.	Single Blue Per Cwt	Single Blue Per Head
July								
(1) 16	54	92.7	22.5	20.62	80	90.5	21.25	19.23
August								
(2) 6	100	92.0	20.50	18.86	128	90.9	19.50	17.73
(3) 27	65	89.0	21.50	19.15	94	87.0	20.50	17.83
September								
(4) 17	101	93.2	20.50	19.10	172	90.9	19.50	17.73
October								
(5) 1	70	90.0	21.25	19.13	209	89.0	20.25	18.02
(6) 15	63	94.0	21.00	19.80	86	88.9	20.00	17.78
(7) 29	101	92.8	21.25	19.71	281	90.7	20.25	18.38
November								
(8) 12	91	94.9	21.00	19.93	188	92.7	20.00	18.54
(9) 26	83	93.1	21.50	20.02	200	92.7	20.50	18.99
December								
(10) 17	79	91.8	21.00	19.27	276	93.2	20.00	18.64
January								
(11) 7	124	94.4	22.50	21.25	273	92.1	21.50	19.80
(12) 28	35	90.6	23.00	22.00	112	94.2	22.00	20.72
February								
(13) 18	23	95.0	23.25	22.09	133	95.6	22.25	21.88
March								
(14) 11	14	97.1	24.50	23.80	18	96.7	23.50	22.72
Total	1,003	92.8	21.44		2,252	91.7	20.55	

APPENDIX N

ASHLEY
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR RED AND YELLOW
PRICE PER HUNDREDWEIGHT AND PER HEAD--1954-1955

Month	Red				Yellow			
	No.	Av. Wt.	Per Cwt	Per Head	No.	Av. Wt.	Per Cwt	Per Head
July								
(1) 16	42	83.1	20.25	16.83	--	--	--	--
August								
(2) 6	39	81.9	18.00	14.75	11	75.0	16.50	12.38
(3) 27	37	80.5	18.75	15.10	12	75.4	17.00	12.82
September								
(4) 17	56	83.2	18.00	14.98	12	74.2	17.00	12.61
October								
(5) 1	92	84.7	19.00	16.10	12	75.4	17.50	13.20
(6) 15	16	85.9	18.50	15.90	2	62.5	17.00	10.63
(7) 29	136	83.8	18.75	15.71	57	76.5	17.25	13.19
November								
(8) 12	87	83.4	19.00	15.86	45	75.1	17.00	12.77
(9) 26	110	87.0	19.50	16.97	43	79.0	18.00	14.23
December								
(10) 17	109	85.7	18.50	15.86	32	75.3	17.00	12.80
January								
(11) 7	85	79.5	20.00	15.89	17	72.4	18.50	13.39
(12) 28	51	87.3	20.50	17.89	7	69.3	19.00	13.16
February								
(13) 18	69	85.3	21.00	17.91	10	74.5	19.00	14.16
March								
(14) 11	7	77.9	22.00	17.32	2	87.5	20.75	18.16
Total	939	84.1	19.25		262	75.7	17.48	

Month
June
(1) 21
July
(2) 5
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August
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APPENDIX O

LANCASTER
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR FIRST TWO TOP GRADES
PRICE PER HUNDREDWEIGHT AND PER HEAD--1954-1955

Month	Double Blue				Single Blue			
	No.	Av. Wt.	Per Cwt	Per Head	No.	Av. Wt.	Per Cwt	Per Head
June								
(1) 21	138	92.0	25.0	23.00	127	88.0	23.75	20.91
July								
(2) 5	19	87.9	23.00	20.21	80	82.2	22.00	18.08
(3) 19	122	88.6	22.75	20.17	194	85.9	21.25	18.25
August								
(4) 2	153	85.7	22.50	19.29	151	81.9	21.25	17.41
(5) 16	437	87.3	24.00	21.08	323	80.8	22.75	18.38
(6) 30	143	86.3	21.25	18.34	194	80.9	19.75	15.97
September								
(7) 13	197	88.6	21.75	19.27	214	86.1	20.50	17.64
(8) 20	43	88.8	20.60	18.30	55	86.8	19.35	16.80
(9) 27	115	88.7	20.50	18.21	158	89.5	19.15	17.13
October								
(10) 4	142	89.9	21.00	18.89	135	85.1	19.50	16.59
(11) 11	66	92.0	20.00	18.41	104	83.4	18.75	15.63
(12) 18	32	88.8	20.50	18.19	54	81.3	19.50	15.85
November								
(13) 1	221	90.5	21.50	19.41	284	87.7	20.25	17.78
(14) 15	226	94.9	21.25	20.17	240	90.7	20.00	18.14
(15) 29	295	93.1	20.75	19.31	291	88.2	19.50	17.20
December								
(16) 13	81	93.1	20.25	18.85	79	88.2	19.00	16.76
(17) 27	126	91.0	21.75	19.78	145	89.0	20.50	18.24
January								
(18) 10	85	92.4	22.25	20.64	88	88.7	21.00	18.66
(19) 24	80	91.3	22.75	20.77	111	88.6	21.50	19.05
February								
(20) 7	127	92.1	23.25	21.41	121	87.2	22.00	19.20
(21) 21	28	88.0	23.25	20.47	33	86.2	22.00	18.97
Total	2,904	90.2	22.05		3,227	85.9	20.72	

APPENDIX P

LANCASTER
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR RED AND YELLOW
PRICE PER HUNDREDWEIGHT AND PER HEAD--1954-1955

Month	Red				Yellow			
	No.	Av. Wt.	Per Cwt	Per Head	No.	Av. Wt.	Per Cwt	Per Head
June								
(1) 21	74	77.2	21.75	16.81	--	--	--	--
July								
(2) 5	52	78.7	20.00	15.73	--	--	--	--
(3) 19	152	79.4	19.75	15.68	--	--	--	--
August								
(4) 2	96	74.9	19.75	14.79	7	97.1	17.00	16.51
(5) 16	167	71.7	21.00	15.06	--	--	--	--
(6) 30	222	74.1	18.25	13.53	3	70.00	16.00	11.20
September								
(7) 13	184	76.7	19.00	14.58	--	--	--	--
(8) 20	52	77.2	18.00	13.90	--	--	--	--
(9) 27	116	84.7	17.75	15.02	--	--	--	--
October								
(10) 4	74	79.7	18.00	14.35	8	69.4	16.25	11.27
(11) 11	117	76.8	17.50	13.43	--	--	--	--
(12) 18	78	75.8	18.00	13.65	--	--	--	--
November								
(13) 1	183	77.8	18.50	14.38	20	85.5	17.90	15.29
(14) 15	227	81.2	18.50	15.02	--	--	--	--
(15) 29	258	79.1	18.25	14.43	94	68.1	16.75	11.41
December								
(16) 13	83	80.5	18.00	14.53	--	--	--	--
(17) 27	27	85.6	19.25	16.47	--	--	--	--
January								
(18) 10	95	80.5	20.00	16.12	--	--	--	--
(19) 24	82	84.9	20.50	17.40	24	71.3	18.50	13.18
February								
(20) 7	37	82.3	21.00	17.28	--	--	--	--
(21) 21	31	80.2	20.50	16.43	--	--	--	--
Total	2,477	78.3	19.5			71.5	17.33	

APPENDIX Q

LONDON
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR FIRST TWO TOP GRADES
PRICE PER HUNDREDWEIGHT AND PER HEAD--1954-1955

Month	Double Blue No.	Av. Wt.	Per Cwt	Per Head	Single Blue No.	Av. Wt.	Per Cwt	Per Head
July								
(1) 6	101	88.4	$24.00	21.21	195	84.1	23.00	19.34
(2) 27	225	91.6	23.00	21.06	351	87.3	22.00	19.21
August								
(3) 17	296	89.5	23.00	20.59	453	85.3	22.00	18.78
(4) 31	84	88.6	22.50	19.93	203	85.1	21.50	18.31
September								
(5) 14	200	89.5	21.75	19.46	349	86.1	20.75	17.87
(6) 28	90	91.9	21.75	19.82	206	85.8	20.75	17.79
October								
(7) 12	58	89.4	20.75	18.55	186	86.7	19.75	17.12
(8) 19	67	92.6	21.50	19.91	135	87.9	20.50	18.01
(9) 26	5	89.0	20.50	18.25	23	83.9	19.50	16.36
November								
(10) 2	36	92.5	22.00	20.35	98	87.7	21.00	18.41
(11) 9	29	92.4	21.00	19.41	98	88.2	20.00	17.63
(12) 23	49	89.8	21.00	19.03	167	89.6	20.00	17.93
December								
(13) 7	50	95.2	21.50	20.47	204	88.5	20.50	18.14
(14) 21	63	95.3	22.00	20.97	188	89.5	21.00	18.79
January								
(15) 11	72	92.7	22.50	20.86	333	90.8	21.50	19.52
February								
(16) 1	54	93.1	22.75	21.17	97	88.0	21.75	19.14
(17) 22	34	90.6	23.00	20.84	58	86.0	22.00	18.93
Total	1,513	90.8	22.38		3,344	87.2	21.22	

APPENDIX R

LONDON
NUMBER OF LAMBS MARKETED
AVERAGE WEIGHT BY POOL FOR RED AND YELLOW
PRICE PER HUNDREDWEIGHT AND PER HEAD--1954-1955

Month	Red				Yellow			
	No.	av. wt.	Per Cwt	Per Head	No.	Av. Wt.	Per Cwt	Per Head
July								
(1) 6	32	81.1	21.50	17.44	5	70.0	19.00	13.30
(2) 27	120	76.5	20.50	15.69	24	64.8	19.00	12.31
August								
(3) 17	150	78.4	20.50	16.07	30	69.5	18.50	12.86
(4) 31	157	81.2	20.00	16.24	68	75.3	18.00	13.67
September								
(5) 14	103	78.4	19.25	15.48	24	70.4	17.75	12.50
(6) 28	151	80.4	19.25	15.48	102	71.2	17.75	12.64
October								
(7) 12	179	79.6	18.50	14.73	72	73.8	17.00	12.55
(8) 19	88	79.8	19.00	15.17	33	70.9	17.50	12.41
(9) 26	24	79.6	18.50	14.72	4	65.0	17.50	11.38
November								
(10) 2	86	80.4	19.25	15.48	59	75.6	17.75	13.42
(11) 9	94	79.0	18.50	14.62	36	69.2	17.25	11.93
(12) 23	153	83.8	19.00	15.91	61	73.1	18.00	13.16
December								
(13) 7	159	80.8	19.50	15.75	111	76.6	18.00	13.82
(14) 21	119	82.9	19.50	16.17	44	68.4	18.00	12.31
January								
(15) 11	85	78.5	20.00	15.70	79	78.9	18.20	14.35
February								
(16) 1	66	81.5	20.25	16.51	22	70.9	18.00	12.76
(17) 22	57	77.1	20.50	15.81	31	70.3	19.00	13.36
Total	1,823	80.1	19.53		805	73.1	17.93	