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Bowring, James R.

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Livestock Markets in New Hampshire

By James R. Bowring

AGRICULTURAL EXPERIMENT STATION
UNIVERSITY OF NEW HAMPSHIRE
DURHAM, NEW HAMPSHIRE

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Livestock Markets in New Hampshire

By J. R. BOWRING

Associate Agricultural Economist
New Hampshire Agricultural Experiment Station

Introduction

LIVESTOCK SOLD for slaughter from New Hampshire farms is primarily a joint product of the dairy industry. Some few specialized beef, hog, and sheep producers also contribute to the market. A major part of the trade in livestock is for breeding and replacement of dairy herds.

The methods of marketing, the agencies concerned, and the pricing techniques discussed in this bulletin are an indication of the efficiency with which livestock moves from farms to the final consumer in the State of New Hampshire.

Review of Literature

A study of the marketing of Vermont cattle by Fred E. Webster[1] reviewed the existing outlets for Vermont farmers. He recommended improvements in farm pricing and market reporting without specifying any particular market process that would improve returns to farmers. Curtiss and Matzen[2] reviewed the market institutions for livestock sales from New York farms and stressed the importance of replacement sales in that dairy state. They found that auctions were not widely used by farmers who bought their hogs and sheep for fattening from other farmers or dealers.

There are many studies of livestock markets in specialized producing states,[3] but these are of little importance to New Hampshire since the size of our industry and the conditions of production differ. New Hampshire is more characteristic of the New England conditions about which there has been little organized study.

Location of Production

There were 109,658 cattle and calves on farms in New Hampshire in 1950.[4] Of these 60,141 were milk cows, leaving 49,517 beef animals, dairy calves, bulls, and heifers under two years. The majority of these were dairy breeds.

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[1] *Marketing of Vermont Cattle.* F. E. Webster, Vt. Ag. Exp. Sta., Bul. 569.

[2] *Marketing New York Livestock.* W. M. Curtiss and E. H. Matzen, New York Agr. Exp. Sta., Ithaca, N. Y. Bul. 744.

[3] *See Bibliography on the Marketing of Livestock, Meat and Meat Products.* USDA Bul. 15, 1951.

[4] U. S. Census of Agriculture, 1950. U. S. Department of Commerce.

There has been a decline in the number of cattle on farms since 1900, as shown in Table 1.

Table 1. **Number of Livestock on Farms in New Hampshire — 1900 to 1950**

Type	1900 Thousands	1910 Thousands	1920 Thousands	1930 Thousands	1940 Thousands	1950 Thousands
Cattle and calves	211	168	164	121	116	110
Hogs	51	28	42	11	11	13
Sheep	65	31	22	21	8	7

Some increase in the number of cattle on farms to an estimated 115,000 was apparent in 1952. This is probably a temporary phenomenon that does not violate the general downward trend in livestock numbers of all types which has been in progress since 1900.

The cattle are located predominantly in the Connecticut and Merrimack valleys. The northern counties of Grafton and Coos claim the largest numbers, followed by Hillsborough and Merrimack, with the lowest number in Carroll County.

Table 2. **Number of Cattle on Farms in New Hampshire by Counties — 1950**

County	Number of Cattle	Distribution Percent
Belknap	5,373	4.9
Carroll	3,188	2.9
Cheshire	9,334	8.5
Coos	14,459	13.2
Grafton	22,314	20.3
Hillsborough	13,580	12.4
Merrimack	13,512	12.3
Rockingham	11,787	10.7
Strafford	6,868	6.3
Sullivan	9,243	8.4
State	109,658	100.0

About two thirds of all farms in the state have cattle and 75 percent of the cattle are on a third of these farms.

During 1952 there was a spring pig crop of 13,000 and a fall farrowing of 2,000 sows to produce 11,000 pigs. Approximately 13,000 hogs were marketed and the rest were farm slaughtered or custom slaughtered for home use.

There were approximately 4,000 lambs born in 1952 of which 2,000 were marketed, 1,000 died, and 1,000 were kept on farms for breeding.

Livestock Markets

The markets for cattle can be divided into three major segments; for slaughter, for dairy herd replacement, and for purebred breeding. There may be some overlapping of these uses. For example, a heifer sold to a dealer for slaughter may be diverted to replacement stock and the purebred sales will probably also include dairy herd replacement. In general, however, there are three separate markets and three sets of prices.

FIG. I

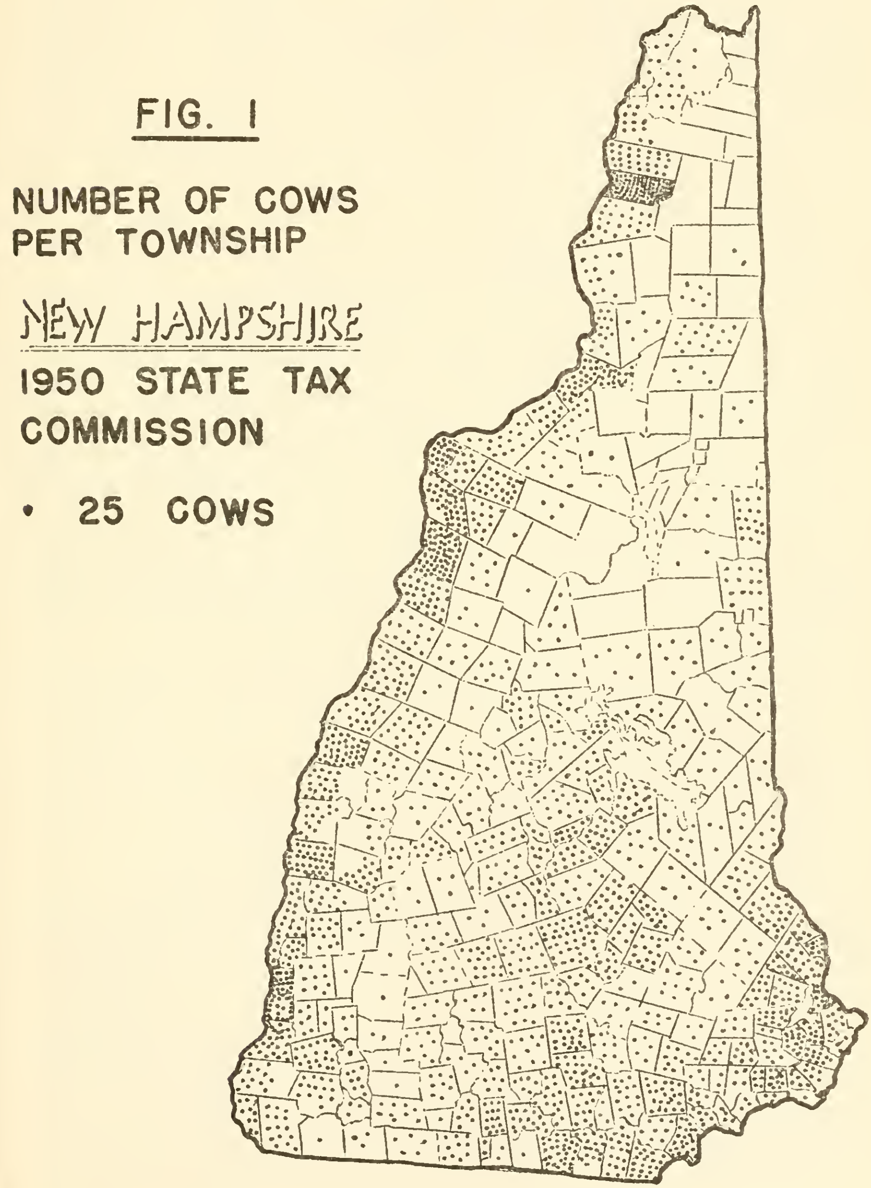


Table 3. **Number of Hogs, Pigs, Sheep, and Lambs on Farms in New Hampshire by Counties — 1950**

County	No. of Hogs and Pigs	Percent Distribution	No. of Sheep and Lambs	Percent Distribution
Belknap	745	5.8	462	6.2
Carroll	470	3.7	233	3.2
Cheshire	674	5.3	506	6.8
Coos	597	4.7	482	6.5
Grafton	1,536	12.0	1,115	15.0
Hillsborough	2,307	18.2	1,298	17.5
Merrimack	2,466	19.3	1,017	13.7
Rockingham	2,067	16.2	913	12.3
Strafford	1,051	8.2	810	10.9
Sullivan	839	6.6	587	7.9
State	12,752	100.	7,423	100.

Cattle for Slaughter

The farmers' market outlets for slaughter cattle include packers, dealers, commission houses, auctions, and home use.

There are 26 slaughterers in New Hampshire.[1] Ten of these are commercial packers. A commercial packer is defined as a slaughterer who takes title to over 50 percent of the animals he slaughters for resale as meat. One of the packers handles western beef only. Three packers combine local cattle purchases with out-of-state purchases of live cattle. The remaining seven follow a seasonal pattern of slaughter depending on the supplies of local beef. Any deficiencies in market requirements are made up by inshipments of dressed meat. These ten commercial packers handled 91 percent of the cattle slaughtered in 1952.

In addition to sales to packers located in the State of New Hampshire, a large proportion of the cattle is shipped to the Brighton market in Massachusetts. The following table is an estimate of the disappearance of cattle in 1952.

Table 4. **Estimated Disappearance of New Hampshire Cattle — 1952**

Commercial Slaughter in New Hampshire	11,500*
Sales at Brighton Stockyards	6,300†
Farm Slaughter	2,000‡
Death	3,000‡

* Survey of Slaughtering Establishments in New Hampshire
† Sales at Brighton Stockyards
‡ Farm Production, Disposition and Income. USDA, April 1953

Table 5. **Estimated Disappearance of Calves Born in 1952 in New Hampshire**

Born	58,000*
Commercial Slaughter in New Hampshire	14,000†
Sales at Brighton Stockyards	11,000‡
Deaths	5,000*
Farm Slaughter	2,000*

* Farm Production, Disposition and Income. USDA, April 1953
† Survey of Slaughtering Establishments in New Hampshire
‡ Estimate from Brighton Stockyards

[1] This figure is based on a field survey and registration under O.P.A. in 1943-4.

The annual calf crop of this predominantly dairy state provides a large supply of veal for local slaughter and for shipment to Brighton stockyards.

Sales Outlets of Packers

Packers sell the dressed beef and veal to wholesalers, retailers, jobbers, or to consumers and processors. The following table estimates the sales of dressed meat slaughtered in New Hampshire.

Table 6. **Trade Outlets for Dressed Meat Slaughtered and Packed in New Hampshire — 1952***

Outlet	Quantity (lbs. of Dressed Meat)	Percent of Total
Wholesaler	7,518,161	44.3
Retailer	4,569,245	26.9
Jobber	3,687,726	21.8
Direct to Consumer	967,931	5.7
Processor	207,550	1.2
Hotels and Restaurants	18,494	.1
Total	16,969,107	100.

* Includes live animals shipped into New Hampshire from out of state. Based on 1953 field survey.

Custom Slaughterers

The major proportion of cattle, sheep, and hogs slaughtered on a custom basis is for local households at an agreed cost per head. Only three of the 16 custom slaughterers take title to some of the meat for sale in their own retail stores or to other retailers. The majority simply provide the service and return the dressed animal to the owner. They handle only 9 percent of the total slaughter of New Hampshire raised cattle, but a larger proportion of the hogs.

Over 90 percent of the livestock commercially slaughtered for resale is cattle and calves. In comparison, 28 percent custom slaughtering is cattle and calves and 68 percent hogs. The percentage distribution of the total number slaughtered is given in Table 7.

Table 7. **Percentage Distribution of Commercial and Custom Slaughter in New Hampshire — 1952**

Type	Cattle	Calves	Sheep	Swine	Total
Commercial					
Percent of total	51.8	39.2	1.8	7.2	100
Custom*					
Percent of total	18	10	4	68	100

* About 12 percent of this custom slaughter is performed by the commercial slaughterers in addition to their commercial operations.

Size of Operation

Some idea of the relative size of the slaughter operations in the state is provided in the following tables which classify the slaughterers by the head of livestock handled in 1952.

Table 8. **Commercial Packers by Number of Livestock Slaughtered in 1952**

Head of Livestock	Number of Slaughterers
4,000 and over	4
2,000 – 3,999	0
1,000 – 1,999	3
500 – 999	2
0 – 499	1
	10

The custom slaughter operations are considerably smaller, as shown in Table 9.

Table 9. **Custom Slaughterers by Number of Livestock Slaughtered in 1952**

Head of Livestock	Number of Slaughterers
500 – 999	3
250 – 499	5
100 – 249	3
0 – 99	5
	16

Custom rates

The current rates for custom slaughter vary from as low as the hides and pelts for cows, calves, and sheep, and \$3 for swine, to as high as \$6 for cows plus the hide, \$2 for calves plus hide, and \$2 for sheep plus pelt, and \$6 for swine.

The average rate is about \$2 plus hide for cows and calves, \$2 for sheep plus pelt, and \$5 for hogs.

Inspection

Only one of the slaughter operations is under Federal inspection, 7 are under local inspection, the remainder has no official inspection.

By-products of the slaughter operations are hides, bones and hoofs, tallow, and entrails. There are two tanneries and one rendering company operating in the state. The two tanneries buy hides and are located in Boston, Mass., and Somersworth, N. H. The rendering plant buys offal and hides and is located in Manchester, N. H.

Dairy Herd Replacement

The maintenance of milking herds necessitates a continuous replacement of dairy cows because of age, disease, or accident. Every dairyman must at some time obtain additional cows or heifers. Many of these replacements are raised by the dairymen and some are purchased. The most common sources of purchase are other farmers and dealers. No statistical accounting is made of the number of these transactions.

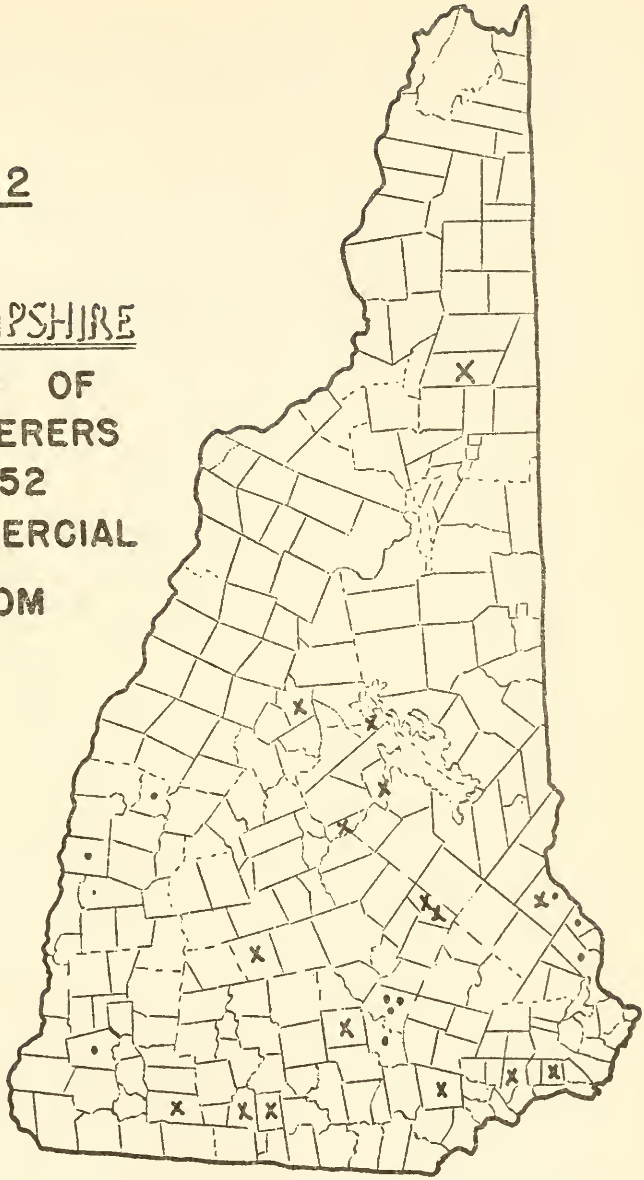
FIG. 2

NEW HAMPSHIRE

LOCATION OF SLAUGHTERERS IN 1952

• COMMERCIAL

X CUSTOM



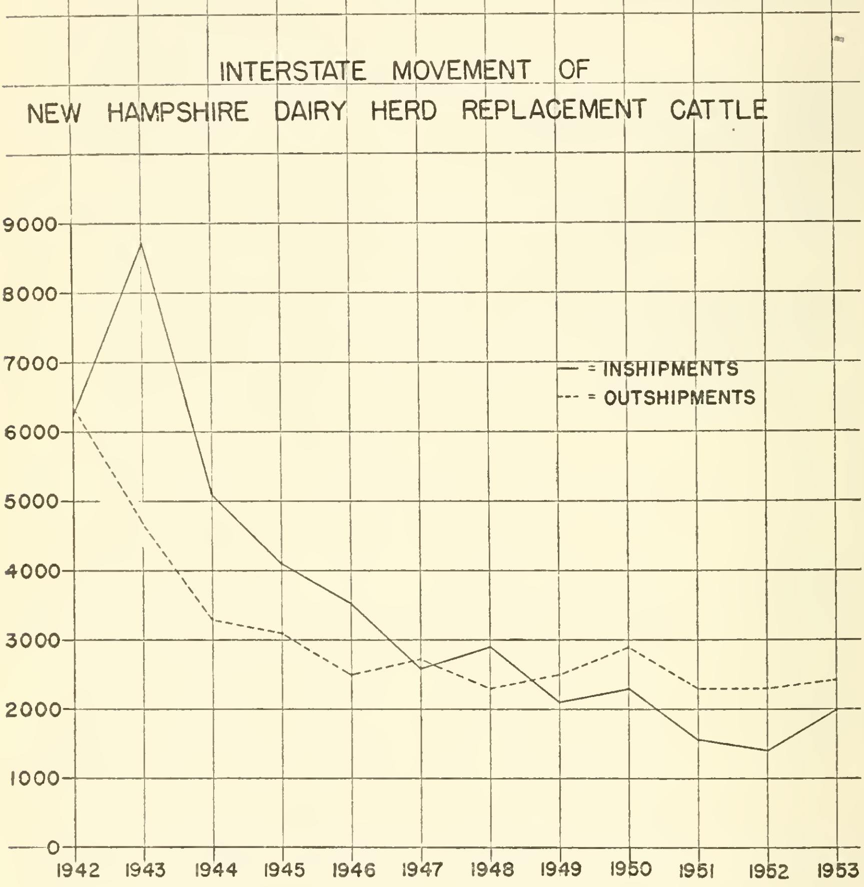
The 1953 report of cows and heifers two years old and over kept for milk is 70,000.[1] At an annual culling rate of 20 percent, 14,000 replacements per year would be required to maintain present cow numbers.

The Dairy Herd Improvement Association estimates that 6 per 100 milking cows of their association herds are sold for replacement. This pro-

[1] Livestock on Farms, Jan. 1, 1953. USDA Crop Reporting Board, Washington, D. C.

vides us with an estimate of 4,200 dairy cows sold as herd replacements. If 80 percent of the sale for replacement are mature cows, then the total sales as herd replacement, including youngstock, would be 5,250 head per year. This leaves 8,750 raised replacements retained in dairy herds and not offered for sale.

FIG. 3



Dairy cows are shipped by dealers into the state from Canada, Maine, and Vermont, and dairy cows are shipped out of the state to markets in the southern New England States. From 1942 through 1948, excluding 1947, the inshipments exceeded the outshipments as dairy herds were being built up. From 1948 to 1953 outshipments of dairy cattle exceeded inshipments. The relationship is shown graphically in Figure 3. With net outshipments in 1953 of 400, this should be deducted from the sales estimate of 5,250, to arrive at a figure of 4,850 dairy cows both imported and raised which were sold to farmers and retained in the State of New Hampshire in 1953.

Purebred Sales

The Guernsey, Jersey, Holstein, Ayrshire, and Brown Swiss are represented by New Hampshire Breeding Associations. The Purebred Dairy Cattle Association is a state organization to coordinate the policies of the breed associations, with respect to shows, testing, guarantees, and health.

There is no formal sales organization from which the number of sales or the prices can be obtained. Occasionally farm sales are announced. A producer interested in purebred stock can contact the secretary of the association, who will act as a broker for herd owners in his association without financial return. This is a specialized market, and premiums over the prices for the general run of replacement stock are generally asked and obtained. Few cattle dealers handle this type of transaction. The artificial insemination program is reducing the need for dairymen to buy purebred bulls and heifers for dairy herd improvement.

Dealer Operations

The collection of cattle and sheep from farms other than farm-to-farm sales is primarily performed by dealers. This includes cattle and sheep for slaughter and dairy herd replacement cows. There are 149 livestock dealers licensed to operate in the State of New Hampshire.[1] Of these dealers, 98 are located in New Hampshire, 25 in Massachusetts, 19 in Vermont, and 7 in Maine.

Many of the dealers are not actively engaged in buying and selling in the state or at least have only a small proportion of their total business in New Hampshire. Their location in New Hampshire is shown in Figure 4. The out-of-state dealers are located, in general, close to the New Hampshire state boundary.

Dealers' Buying and Selling Practices

The majority of dealers buying cattle from farmers pay cash at the farm. Some dealers make periodic visits to farms and build up their truck loads from established routes. Other dealers arrange for truck loads by telephone before visits, or are contacted by farmers with cattle or calves for sale.

Mixed loads are common with the smaller dealers, who equip their trucks with removable partitions for this purpose, but are rare with larger dealers. One or two sell on a commission basis and do not take title to the livestock. At least three dealers buy for local packers under contract, and most of the New Hampshire slaughterers buy direct from farmers as well as from dealers. The majority of dealers each handled less than 300 head of all livestock in 1952. Table 10 shows the relative size of the buying operations of dealers and local slaughterers in New Hampshire during 1952.

Dealers not under contract to local packers ship the majority of their purchases to the Brighton market for slaughter or dispose of them at Vermont and the occasional New Hampshire auctions. Numerous dealers

[1] The law defines a livestock dealer as any person, partnership, unincorporated association, or corporation going from place to place buying, selling, or transporting cattle, sheep, or swine, or operating a livestock auction or sales ring.

FIG. 4

NEW HAMPSHIRE

• DEALERS: LICENSED & RESIDING IN N.H., 1952

X AUCTIONS IN N.H., 1952

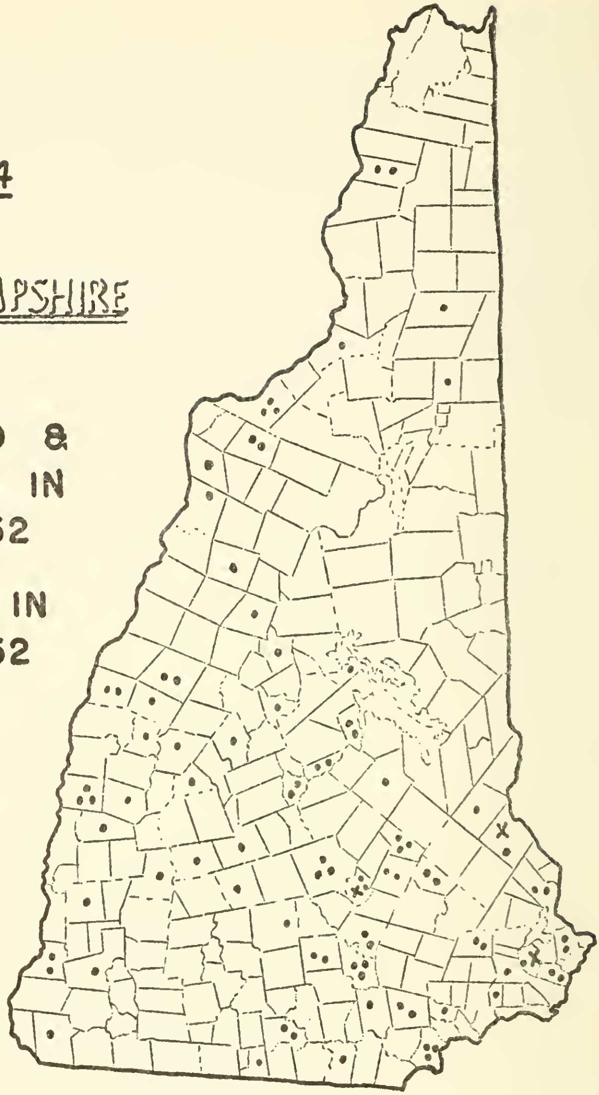


Table 10. **Distribution of 51 Dealers and Slaughterers by Size of Purchases from Farmers in 1952**

No. of Head Purchased from Farmers	N. H. Dealers and/or Slaughterers
2,000 and over	8
1,000 to 2,000	3
500 to 1,000	14
up to 500	26
	51

own farms for holding replacements for sale to individual farmers as the market develops. Small dealers frequently sell to other dealers, particularly when consolidating several small lots into one truck load.

Table 11. **Disposition of Livestock by Dealers Only in New Hampshire for 1952**

Market	Percent
Brighton	42
Packers	31
Other dealers and auctions	8
Local	19

Other Sales Outlets

There is one commission house in the State of New Hampshire which handles sales on local and Brighton markets. One or two dealers sell on commission, but the majority consign livestock for sale outside the state either to the Brighton Stockyard Commission House or a commission man selling on the Brighton market. Auctions play a minor role in cattle, hog, or sheep sales. Some producers use Vermont auctions to buy or sell replacements. Home use accounted for about 2,000 head of cattle and 7,000 hogs. Sheep and lambs are sold locally or in specialized seasonal markets, such as at Easter and for certain religious groups.

Prices and Price Formation

Modern communication and transportation serve to bring prices of similar products into line on all markets. The difference in price between two markets will not remain for very long more than the cost of transportation between the markets. If, for example, the price on one market is higher than on another market by more than it will cost to ship from one market to the other, then produce will move to the higher price market until prices are brought into line again.

There may be some obstacles to movement, such as sanitation and inspection laws or the buying and selling practices of large firms. Under competitive conditions, however, prices in one region bear a close relationship to prices in other regions.

The influence of prices in the surplus meat producing areas of the West and Midwest is pronounced in New England. Local production is only a small part of total consumption here. To satisfy a total annual per capita consumption of 140 lbs. of red meat, New Hampshire produces an equivalent of about 20 lbs. A similar situation exists in Massachusetts. Large quantities of dressed and live animals are shipped in from Midwestern markets. Prices in New England are tied closely to the predominant price for western beef at Chicago.

Price Relationship between New England and Chicago

The majority of livestock sold on local markets and in Brighton is cutter- and canner-grade cattle, bob calves, and some garbage fed hogs. Therefore, price comparisons can be made between the lower grade cattle. For example, an increased supply of low-grade cattle from the West will depress prices at Chicago. Packers and slaughterers in New England have the choice of buying local cattle or of ordering from shippers out of Chicago and related markets. The cost of shipping live weight cattle from Chicago to Boston is about $2 per 100 lbs. Therefore, as prices at Chicago rise or fall, the bidding price for similar grades of local cattle will tend to follow suit. Recent heavy shipments of under-finished cattle from the western states lowered the prices on utility and canner beef at Chicago. This was soon reflected in the prices dealers offered farmers in New England even though there was no apparent change in local supply. Extraordinary supply conditions on local markets may depress local prices without a similar decline in western prices. Western buyers, however, are less likely to buy eastern cattle, although they may if the price spread continues for any length of time.

An illustration of the close relationship between Chicago and Brighton prices for cutter- and canner-grade of cattle is given in Figure 5 for the period July 1, 1952, to Dec. 31, 1953.

The Brighton Market

The major market for cattle, hogs, and sheep in northern New England is at Brighton, near Boston. Established around 1830, the Brighton market was once the major price determining point in New England. Market reports are issued weekly and provide up-state producers and dealers with a guide as to what prices can be expected the following week. This takes no account of price fluctuations during the week and is at best a somewhat inadequate measure for current transactions or expected prices. About 80 percent of the sales on the market are by commission men or commission houses so that the risk of price changes is carried by dealers who buy cattle from farmers or by farmers themselves if they have consigned direct. The buyers at Brighton are packer representatives, jobbers, and a few small slaughterers.

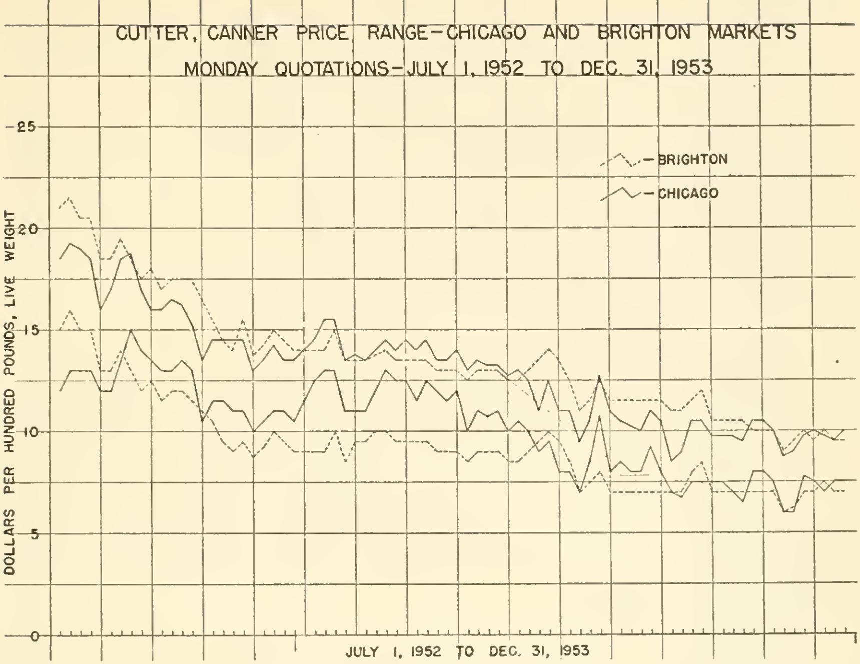
The Brighton price is the major published sale price for livestock in New England and as such is widely used as a guide by dealers in New Hampshire. Supplementary news of Chicago prices is provided by the radio and by Boston newspapers. This is available to producers and dealers alike and should allow for competitive buying and selling. Most dealers use a combination of Chicago and Brighton prices when buying and selling.

Dealers aim at a flat-rate spread between the expected selling price and the farm price aid of about $10 per cow, $3 per calf, $5 per hog, and $2.50 per sheep to cover transportation or holding for sale. This spread will be increased whenever it is possible to bargain for a lower farm price or the market price takes an unexpected up-turn. For this reason dealers are no doubt more conscious of price trends and probable future market prices than dairy farmers selling cull cows and calves. Dealer incomes depend on the accuracy with which they estimate the selling price, particularly if they pay cash at the farm. If they sell on a commission basis, a percentage of sale price is guaranteed. The commission rates charged after delivery to the Brighton market are $1.30 for cows and $.55 for calves, hogs, and sheep per head.

Bargaining Position of Producers

The choice of markets for an individual farmer in New Hampshire who has slaughter cattle or replacement stock for sale is limited. If there is more than one dealer buying in his territory he may compare bids. The newspaper or radio will tell him the price at a central market. If he is anxious to sell

FIG. 5



and buyers are limited, his bargaining power is weaker than if he could choose his time and price. When the price of beef or milk is increasing or is expected to increase, dealers become more active and farmers are in a more favorable bargaining position than in periods of falling prices when the risk of loss by dealers is increased. This is the position of most dairymen in New Hampshire. Specialized beef producers or purebred owners can be more selective in their selling. If they own a truck, direct sales to other farmers will eliminate the dealer. This type of sale for replacement cattle is generally limited to the vicinity of the farm. Contacts through the herd association will provide a greater selection of markets for purebred cattle. Commercial hog markets are limited to packers or local butchers, and lambs are largely sold direct to consumers or butchers.

Buyers of replacement cattle for Southern New England dairy herds can frequently offer attractive prices for dairy cows in Northern New Hampshire where the price of milk is somewhat less than it is in Connecticut or Massachusetts. This practice may remove the better cows from herds and leave the dairymen with the low producers for local milk production.

Conclusion

The major sales of livestock in New Hampshire are dairy herd cull cows for slaughter, and dairy herd replacement cattle. There is a considerable amount of custom slaughtering of hogs, but the majority of meat consumed in the state is produced in the West and Midwest. There is no uniform state inspection law for slaughter operations, and conditions vary between towns, from little or no controls to rigid controls. Uniform laws would reduce impediments to the transfer of operations from one town to another as supply or other conditions warranted and would facilitate State inspection of operations for the protection of consumers' health.

Dealers buy cattle, hogs, and sheep from farmers for sale on the Brighton market, or to local packers or butchers. There are ten commercial packers in the state who slaughter local cattle supplemented by inshipments of live or dressed western beef. The choice available to dealers of selling locally or to Brighton means the quoted Brighton price and the sale price in the state are closely related. The shipment of western livestock to New England forces the Brighton price into line with the Chicago price. Therefore, prices paid to farmers in New England follow the ups and downs of the Chicago market and provide guides to any expansion of the livestock industry in New Hampshire.

There are many dealers with licenses to buy in New Hampshire but only a small proportion are buying steadily. The majority of dealers pay cash at the farm and assume the risk of price changes. They allow themselves a margin to cover costs and profits. Some few dealers buy on commission, which shifts the risk of price changes to the farmer. If all sales were made on a commission basis, the probability of extraordinary profits by dealers would be eliminated and farmers would receive prices paid at Brighton or the local market less an established commission charge. Benefits from unexpected price increases, however, would be balanced by losses from unexpected price declines.

Prices quoted in the New Hampshire Weekly Market Bulletin are Brighton prices of the previous Monday. Subsequent changes in price during the week are not reflected in this quotation and are available only from radio or newspaper news of the Chicago market.

The limited markets available to farmers reduces their bargaining ability in individual sales, but competition between New Hampshire packers and the Brighton market tends to keep dealer margins at uniform rates. During periods of raising prices the possibility of higher dealer spreads is increased. Dairy herd replacement cattle are sold to other farmers or to dealers for these transactions. There is no central market at which prices are established and there is no quoted price by which sales can be made. Therefore, the farm price will vary between dealers and the bargaining power of dairymen. The general price level will be influenced by the price of milk and the price of beef, but considerable leeway for price concessions or gains exists. In the majority of sales, there is no record of the cows' ancestors or production potential to accompany the asking price.

The predominance of meat and livestock shipments into New England from western sources limits the extent to which livestock sales either for slaughter or for dairy herd replacement can become more profitable. Within this national price framework, certain economies of assembly by consolidation of loads might be possible, or producers might organize into a bargaining cooperative to protect individual farmers not familiar with market price changes and to protect buyers against diseased and low producers.

The competitive nature of the industry, however, relates prices in New England to prices in other livestock producing areas. Prevention of price fluctuations, or short-run price declines not justified by long-run market demand and supply for meat, therefore, are national problems and are best solved at that level.