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**AN ECONOMIC ANALYSIS OF THE MARKETING OPERATIONS
OF THE UTAH BERRY GROWERS' ASSOCIATION**

by

George W. Armstrong

A thesis submitted in partial fulfillment of the requirements

for the degree of

Master of Science

in

The School of Commerce

Utah State Agricultural College

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Approved:

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For English Department

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DEFINITION OF TERMS

Commission men are local individuals who sell raspberries for the producers and receive a set commission for the performance of that service.

"Others" are those peddlers and other individuals who buy raspberries at the plant.

Surplus is a quantity offered for sale on the Salt Lake Public Market over and above that which would sell for a fair price.

Orderly marketing is the distribution of a supply of raspberries to various markets that will supply the demand and permit a fair return.

AN ECONOMIC ANALYSIS OF THE MARKETING OPERATIONS OF THE UTAH
BERRY GROWERS' ASSOCIATION

INTRODUCTION

Raspberry production in Utah is concentrated to a large extent in Utah county. According to the 1940 census, Utah county contains 62 percent of the state acreage of 611 acres. Average raspberry acreage in Utah is only about one-half acre per farm on farms reported as growing raspberries. With such a small acreage the average producer cannot afford to devote very much time and effort to the production and marketing of raspberries. In the majority of cases raspberry production is carried on by the farmer's wife, as a means of gaining "pin" money for use in the household. Proceeds from raspberries are one of the first cash incomes of the year received from fruit production. The harvesting of raspberries begins about the 25th of June and lasts until the end of July in Utah county.

Because of the small acreage per grower, short production season, and high perishability of raspberries, a problem of marketing arises. Previous to 1939, the Salt Lake Public Market was over-supplied with raspberries during peaks of production. This resulted in low prices. Peddlers and truckers dictated the price received by producers. Thus, low prices often resulted and caused the berries to be left on the vines as the prices would not pay

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the cost of picking and packing.

In order to provide better market outlets, establish satisfactory grades and standards, and provide for more orderly marketing, the producers in Utah county organized a Cooperative Marketing Association in 1939. This association was organized for the purpose of marketing raspberries grown by producers in Utah county from Mapleton to Pleasant Grove.

Source of Data

Data concerning the receipts, sales, expenses, and returns for raspberries were secured from the records of the Utah Berry Growers' Association for the years 1939, 1940, and 1941.

Information concerning organization, marketing procedure, and operations of the Association was secured from officers and members of the Association and the county agents. Information regarding climatic conditions was secured from the United States Department of Commerce climatological data. Production reports were secured from the Agricultural Census reports. Additional data were obtained from other sources having information concerning the Utah Raspberry Growers' Association and the marketing of raspberries in Utah.

Purpose of Study

The purpose of this study is: (1) to show the problems relating to the marketing of raspberries in Utah, (2) to analyze data made available by the Utah Berry Growers' Association order to show market areas, methods of marketing, price received by method of

sale, marketing expenses and to determine sales and prices received on week days and holidays, (3) to analyze the possibility of extending the markets for Utah raspberries.

GENERAL CONDITIONS

The first red raspberries were cultivated in Europe about 400 years ago. Several varieties were cultivated in the United States before 1800. The Outhbert, which is the most important variety in Utah, was discovered in 1865. This variety is thought to be a hybrid of a European variety, Hudson River Antwerp, and a wild native red. 1/

The cultivation of raspberries is limited very largely to the northern part of the United States, chiefly in those sections in which wild raspberries grow most abundantly. The red raspberry sections from which extensive shipments are made are located in southern New Jersey, in the Hudson River Valley, in western New York, in western Michigan, in the Puyallup Valley of Washington, and about Sebastopol, California.

Physical Factors

Climate. The climatic conditions during a season determine to a great extent not only the shipping quality but also the quantity shipped in a fresh state. During wet rainy periods it is impracticable to pick berries. Much fruit becomes over-ripe and if the rainy weather continues for any length of time, all the berries will lack the desired firmness, being soft, very tender, and full of moisture. The rains, therefore, determine largely the fresh fruit output and are a big factor in the success attained during any one season.

1/ Gourley, J. H., Howlett, F. S. Modern Fruit Production
New York, Macmillan Company 1941

4

The average rainfall in Utah county (table 1) is lowest during June and July which presents an ideal condition for the harvesting of raspberries.

Economic Factors

Over a period of years the deciding factor as to the maintenance or increase in the production of raspberries is determined by economic factors. Such factors as marketing agreements, proximity, size, and type of market, the competition within the market, price fluctuations, and transportation costs must be taken into consideration.

State Raspberry Marketing Order. In the spring of 1942 an attempt was made to establish marketing agreements and set up a board of control to permit the orderly flow of raspberries to the markets within the state. The main purpose of the marketing order was to regulate the flow of raspberries on the Salt Lake market to meet the demands of the market. This orderly marketing will presumably stabilize the price of the fresh market in Salt Lake.

The state is divided into five important raspberry producing sections. One member is selected from each section. These members constitute the Board of Control. 2/ The Board of Control can set up a surplus pool whenever they deem it advisable to limit the produce moving to fresh markets. The surplus pool is created to which each handler must contribute a percentage of his crop. The Board disposes of this surplus by putting it in cold pack or any other possible outlet. The returns for the entire sales are pooled.

2/ Revised Marketing Order Regulating the Handling of Raspberries Grown and Marketed in Utah. 1942. Published by the Utah State Department of Agriculture.

Table 1. Average monthly temperature and precipitation at
Provo Bench - elevation 5,000 1/

	Length of	Jan	Feb	M	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Record Yrs.													
Ave. temperature	14	24.2	31.4	39.2	48.4	56.7	66.0	73.8	70.3	60.5	48.0	37.5	28.5	48.7
Ave. max. temp.	14	35.2	42.3	51.3	62.0	77.3	83.2	90.8	87.1	77.0	67.0	48.7	38.2	62.5
Ave. min. temp.	14	13.2	30.4	27.1	34.4	41.7	48.8	56.8	53.5	44.0	34.1	26.3	18.7	34.9
Highest temp.	14	58	66	77	89	94	101	102	99	92	80	72	61	102
Lowest temp.	14	-20	-17	0	12	27	29	35	39	21	11	4	-28	28
Ave. Precip.	14	1.56	1.64	1.76	1.79	1.94	58	89	1.22	1.37	1.41	1.60	1.61	17.53

1/ United States Weather Bureau

These returns are then prorated back to the grower on the basis of the quality and grade of produce contributed. The expenses incurred by the Board is prorated to the grower on the amount of produce sold.

On April 29, 1942, the raspberry growers of the state voted as to whether or not they wanted the marketing order. Each district was allotted a definite number of ballots. These ballots were sent to the county agents in each district. The county agent distributed them to the growers, who filled in the ballot and returned it to the State Department of Agriculture.

The results of the raspberry balloting were as follows: Out of 182 ballots, sixty-four were for, and 118 against the agreement. The 1941 acreage was 94.21 for, and 148.17 against. Of the proposed 1942 acreage 116.86 were for, and 166.75 were against the agreement. 3/ The 1941 and 1942 acreage was based on the same membership. The voters listed their acreage in 1941 and their planned acreage for 1942. Thus, only 35 percent of the growers voted for the marketing order. Eighty-six percent of the votes came from Utah county because growers in other counties were not interested in the marketing order inasmuch as it would have little affect on their present marketing procedures.

The need for such a state marketing order on raspberries at the present time is not so pressing. The Utah Raspberry Growers' Association is regulating a larger percentage of the surplus berries by developing out of state markets. The demand for canned raspberries is increasing and more of the surplus is being disposed of in this

3/ Letter from Commissioner of Marketing, Seth T. Shaw

manner. Thus, the need for such a marketing order is not as great as it was a few years ago. The Association has stabilized and permitted a more orderly flow of raspberries on the Salt Lake market. Out of state markets have been established and canning and cold pack companies have increased the demand for the surplus raspberries. These reasons prompted many growers to believe that such a marketing order would be just an additional expense with no particular benefits.

Competition. Competition for the sale of raspberries in Utah is mainly between growers within the state. Growers near the Salt Lake market compete with each other for the sale of raspberries on the public market. Peddlers and truckers compete with each other in supplying raspberries to other areas of the state. The inhabitants in Utah could probably consume all of the raspberries grown in the state if the production period was spread over a longer period of time. The production season of raspberries is short; they are prolific in their bearing, and sales to local markets are highly competitive. Large production, accompanied by slow reacting markets, cause price cutting and price cutting, in turn, yields low returns to the producers.

Competition from other states is very slight. Washington, Oregon, and California are the largest producing states in the Western division (table 2).

Utah has been able to make large shipments to Colorado because the raspberry deal in Utah comes on just after the Colorado deal. Wyoming offers a good market because very few raspberries are grown in this state. Montana, California, Nevada, and Arizona constitute

potential markets. The development of markets in these states will depend on the need for additional outlets for Utah raspberries.

Table 2. Raspberry production and acreage in Western States 1/

State	1919		1929		1939	
	Acreage	Number Quarts	Acreage	Number Quarts	Acreage	Number Quarts
Washington	1,786	4,599,678	5,353	10,761,045	3,690	7,007,899
Oregon	1,176	1,824,901	4,167	5,202,357	4,837	6,187,813
California	417	882,432	1,077	2,966,139	832	2,076,543
Colorado	600	633,766	973	982,546	618	506,971
Idaho	440	375,777	635	694,343	635	812,711
Utah	383	363,801	738	1,002,299	611	838,185
Montana	102	80,018	150	143,005	242	335,184
Wyoming	16	10,979	48	37,243	45	43,188
New Mexico	14	6,202	15	9,290	18	9,791
Nevada	5	3,433	7	4,645	3	3,805
Arizona	0	0	2	0	1	657
TOTAL	4,939	8,780,997	13,165	21,802,912	11,532	17,822,747

1/ Agricultural Census Reports

Raspberries and strawberries are highly competitive crops when both deals come on at the same time. On the average in Utah the strawberry deal comes on about the middle of June and lasts only for about two weeks. Thus, the strawberry deal is just finishing up when the raspberry crop begins. This arrangement by nature eliminates a great amount of competition between these two crops in Utah. Raspberries are also competing to a certain extent with other fruits grown for consumption.

Varieties. The varieties of raspberries grown in an area determine to a great extent the yield and production and also have a decided effect on the marketing after they are produced. The Cuthbert variety is highly desirable for preserving because of color and preserving

qualities.

Some of the older varieties, such as Marlboro, Chief, Utah Red, are small in size and low in production. The fresh market demands a large, firm, and well-colored berry. Some varieties, such as the new Taylor, produce a large, firm, and well-colored berry and also produce a high per acre yield. It is estimated that the production of Taylor raspberries will increase from 600 cases in 1941 to 1,800 cases in 1942. 4

The most important varieties grown in Utah are the Latham, Cuthbert, Taylor, Red June, Newburg, and several other less important ones.

Markets. Preceding the organization of the Utah Berry Growers' Association, the facilities of marketing were rather scattered and disorganized. The main buyers were local handlers commonly called "10 percent men." These men were usually peddlers owning trucks who would obtain a load of raspberries from a producer, sell the load in Salt Lake City, or peddle to retailers and consumers in some other areas, bring the proceeds back to the producer after deducting \$0.10 a case as their commission. This arrangement of selling was undesirable because on the basis of such a payment, the main incentive of the commission man was to sell the berries regardless of price. The commission man received the same commission per case whether he sold the berries for \$0.50 or for \$1.00 a case. The producer had no check on the commission man as to the price he received for the berries. The commission

4 Estimated by county agent of Utah county

man could, and it is reported he often did, pay only a minimum price regardless of what he received for the berries. These commission men usually contracted with the producer to sell his entire crop.

On certain days several truck loads of raspberries would be taken to the Salt Lake Public Market for sale. Consequently, on such days the public market would be over-supplied. In order to remove this large supply, the price would be materially reduced. This often resulted in the producer selling at a loss or peddling to consumers in some other locality.

On some days the supply would be inadequate to take care of the demand and a good price would be established. Producers noticing this reaction would contemplate a high price the next day, and ship more berries on the Salt Lake Public Market; thus, the huge over-supply would greatly reduce the price received. This is the reason for the great price fluctuations on the Public Market. Some days five or six thousand cases of berries would be brought on this market when it could only handle half as many.

The early seller received the advantage of getting a better stall and selling to the early trade before the over-supply caused the price to go down. Very often producers would come to this market with a load of raspberries with the expectation of selling their produce. Because of the over-supply, they would have to take their load to some other part of the state and try to peddle it out as best they could.

This marketing arrangement was very disorganized. The great fluctuation of the price factor caused wide variations in the returns received by producers. The returns would depend to a large extent

on the grower's luck and perhaps on his ability to forecast the probable supply on the market.

This situation was intensified during the season of 1938 because of large yields of raspberries. The 1938 crop was exceptionally good because of very favorable climatic conditions. The large supply was reflected directly by the very low prices received on the market. The situation became so acute that the price dropped to \$0.40 a case and lower. This price would not pay the cost of picking, packing, and selling. The results were that approximately 50 percent of the raspberry crop in 1938 rotted on the vines.

This condition brought the growers to the stark realization that something had to be done if they were to continue in the raspberry business. Many of the growers believed there was a market for their raspberries if they could find it and put the fruit on it at the right time in the desired condition and the right amount.

These are the paramount reasons for the growers getting together for the purpose of trying to form some kind of an association through which they could market their raspberries.

ANALYSIS OF ORGANIZATION AND OPERATION OF UTAH BERRY GROWERS' ASSOCIATION

Organization

Organizers. Before any kind of a producer's organization can be formed and accepted it must contain some sound thinking, far-sighted, and energetic leaders. These leaders must possess initiative, ability, and a strong desire to form an organization that will benefit not only themselves but their fellow members as well.

The first meeting was called on May 1, 1939 for the purpose of discussing the possibilities of organizing a marketing agency to handle the 1939 crop of raspberries. This suggestion met with the approval of the growers. Seven men were elected to serve on the Board as follows:

Emery McKellep	Manager
I. J. Burr	Secretary
J. Ervil Christensen	Director
F. S. Culmer	Director
V. E. Fountin	Director
Clarence Soulier	Director
Alvin Lunceford	Director

Mr. Burr was temporarily appointed to manage the marketing of the berries for the Association until a man could be hired permanently. Mr. Burr handled this position very well. Each year he has been re-appointed as manager of the Association. Mr. McKellep retains the title of manager, but in actual practice he functions as president rather than manager. Mr. Burr functions as both manager and secretary. In 1939 he was paid on the basis of \$6.50 per day, and in 1940-1941, he was paid a salary of \$450 per year. The members of the Board meet at such times as business problems need to be solved.

Beginning in 1940 they were paid \$2.00 per member for each Board meeting attended. The annual meeting of the Association is held on the second Wednesday in March of each year. The Association was incorporated under the state laws of Utah in April 1941. Its main purpose was to market raspberries; however, they handled considerable amounts of other small fruits (table 3).

Other small fruits marketed by the Association have decreased very rapidly. Because they are of small volume, growers could sell these small fruits to peddlers and consumers and dispose of them

without sending them to the Association and at the same time receive a good price. This accounts for the decrease in small fruits other than raspberries which were sold to the Association.

Table 3. Black Caps, dewberries, currants, and gooseberries marketed by the Association

Kind	1939	1940	1941
Black Caps (cases)	425	304	75
Dewberries (cases)	342	955	264
Currants (cases)	740	347	110
Gooseberries (cases)	37	29	0

Membership. The Association is organized without capital stock and consists of members who are engaged in growing or producing some variety of berries, and who are willing to enter into contract with the corporation in connection with the production and marketing of berries. The number of members in the Association has decreased very rapidly (table 4).

Table 4. Number of members in Association

Item	1939	1940	1941
Number members signing contracts	207	89	58
Members selling to Association	198	117	62

There are possibly two main reasons for this decrease in membership. First, many growers who had patches that produced low grade berries plowed them up and are temporarily out of business. The membership decreased 57 percent the first year, yet the total amount

of berries sold through the Association increased 20 percent over 1939. This indicates that the majority of the small producers dropped out at the end of the first season. Second, the reason for the decrease in membership was that some of the growers sold their berries elsewhere, mainly to the "10 percent" commission men.

In 1939, the majority of the growers signed contracts with the Association. The commission men thought the Association would fail, so they made little effort to contract for the berries of any growers. However, the Association was a success and the commission men could not buy berries except from this organization. These private men were not going to be caught in this same condition the next year, so early in the spring of 1940 they approached many of the growers with this story: Why not sell to us in the first place rather than selling to the Association because they deduct a commission and then sell the berries to us anyway? Why not save that commission?

Many growers accepted this reasoning not realizing that the commission men bought from the Association in 1939 because they could not buy any place else. The commission men actively campaigned for contracts with the growers and the Association carried on very little active inducement to get producers to sign up. However, in the spring of 1942 the officers of the Association realized that if they were to retain their membership, they would have to visit the producers and solicit their support and cooperation. In order to improve their membership in 1942 each member of the Board was assigned a definite number of growers to contact for sign-up.

Quantity of Small Fruits Handled by the Association. The Utah Berry Growers' Association is the only association in the state with the exception of the Cache County Fruit Growers' Association which has for its purpose the marketing of small fruits. During the three-year period from 1939 to 1941, 95,761 cases of small fruits were delivered to the Association (table 5).

Table 5. Number cases small fruits delivered to Association

Variety	1939	1940	1941	Total 3 years
Raspberries	30,033	36,548	25,551	92,132
Black Caps	425	304	75	804
Dewberries	342	955	264	1,561
Currants	740	347	111	1,198
Gooseberries	37	29	0	66

Contract with Members. A cooperative, in order to compete with private business, must know the relative amount of produce it is going to handle in any one season. Consequently, they must contract their members so they will know definitely the amounts that will be available for sale by the members. This contract eliminates misunderstanding between the producer and the marketing association and permits orderly marketing of the produce. The Utah Berry Growers' Association made out contracts to be signed by members selling their raspberries through the Association. The main provisions of the contract are as follows:

The grower agrees:

1. To deliver to the marketing agency all berries grown by him in the state of Utah for a period of one year.
2. To deliver his berries in new cups and cases at the expense of the grower.

3. The berries delivered shall be rated according to the grades determined by the marketing agent. The marketing agent shall have the right to grade and tare the berries as it shall determine by tests to be just and equitable.
4. To be bound by decision of the marketing agent's inspector as to the quality and grade of berries delivered and the tare, if any, to be deducted.

The marketing agent agrees:

1. To use his best endeavors and facilities to market the berries delivered to him by said grower.
2. To pay the grower all the net proceeds received from the sale of berries delivered to the marketing agent by the grower. It is agreed and understood that "net proceeds" shall consist of all the receipts from the sale of berries after deducting the cost of receiving, distributing, and marketing the berries.
3. Partial payment to growers shall be made weekly on a day determined by the marketing agent.

It is agreed that the grower shall deliver all his berries to the Association so that it might fill its contracts and hold its markets and customers. If the grower violates this contract, he can be fined a sum of \$100 by the Association. If it becomes necessary to bring legal action against the grower, he must pay all costs of the suit.

In 1939, more members signed contracts than delivered to the Association, which indicates the crop production of some members did not materialize or they sold to someone else. In 1940, only 76 percent of the members selling to the Association were signed up on a contract basis. This shows a rather lax situation on the part of both the producer and the marketing agency. In 1941, 93 percent of the members selling to the Association signed contracts, which shows considerable improvement over 1940.

Finances. The Association is organized on a non-stock basis with no regular membership fees. When the organization was first started in 1939, the officers borrowed \$500 from a bank to begin operations. Since that time the Association has provided its own operating expenses by setting aside each year a small reserve to begin operations the following year. When the first sales are made, part of the receipts are available for expenses. All operating expenses incurred during the year in the marketing of raspberries are charged to and paid by the Association. These expenses are deducted from the proceeds received from the sale of berries.

Method of Payment. As provided in the marketing agreement, a partial payment is made to growers before the end of the pool if they need the money. Other members wait and receive their total payment at the end of the marketing season. All payments are made on the basis of one large pool for the entire raspberry deal. At the end of the season the total expenses are deducted from total receipts and the proceeds proportioned out to the growers according to the grade and number of cases delivered to the Association.

Methods of Handling. The Association rents the building owned by the Timpanogos Marketing Association. This building is located by a good highway and near to the center of the area it serves.

All berries are picked and packed by the individual grower and delivered at the Association plant. As the berries are brought in, the manager inspects and grades them and gives the grower a receipt showing the number of cases and the grade. They are then placed in

the pre-cooler or sent to the cannery to be put in cold pack, depending on the grade and condition of the berries and market demands.

Experience and experimentation have proved that pre-cooling the raspberries will add greatly to the keeping quality of the berries while being shipped to market. Apparently, the ripening processes of raspberries continue very actively after the fruit is removed from the vine, especially if the temperature is relatively high. To delay the physiological activities which constitute ripening, to retard and prevent the germination of mold spores, and to retard the development and growth of mold fungi, it is essential that berries be promptly cooled after picking.

In 1939, the Association had no facilities to pre-cool berries to be sent on long shipments. In 1940, they installed a refrigeration unit in the warehouse which holds 1,500 crates of berries at one time. The berries that are to be shipped to other markets are immediately put in the pre-cooler for a period of from six to ten hours.

Grading. At the present time there are no definite grades for raspberries set up by either the state or federal government. The officers of the Association realized that if they were going to encourage the production of better raspberries, they would have to pay on the basis of grade and quality. In 1939, the officers set up three grades of raspberries: number 1, number 2, and number 3. The basis for this grading was appearance, firmness, color, quality, and degree of ripeness. The main problem of the Association was the marketing of their number 2 grade berries. To encourage the production of better quality

raspberries, the officers of the Association introduced a special grade in 1940. This grade had to be of special quality and texture. The advantage of receiving a higher price for producing better quality berries induced the majority of the growers to improve their production and harvesting methods. In 1939, only 17,191 cases of berries of the total 30,033 were in the number 1 grade (table 6).

Table 6. Number of cases of raspberries received by the Association by grade

Year	: Cases : :Special:	:Cases : :No. 1 :	:Cases : :No. 2 :	: Cases : : No. 3 :	: Total in : 3 years
1939	: 0	:17,191:	:12,035:	: 807	: 30,033
1940	: 490	:29,647:	: 6,206:	: 205	: 36,548
1941	: 879	:23,393:	: 1,258:	: 21	: 25,551
Total	: :	: :	: :	: :	: :
3 years	: 1,369	:70,231:	:19,499:	: 1,033	: 92,132

In 1941, special grade berries had increased 44 percent over 1940 and number 3 grade berries had decreased 90 percent over the same period. The data in Table 6 are an indication of the rapid improvement in the grade of raspberries produced by members of the Association.

The percent of number 1 grade raspberries sold to the Association increased from 57 percent in 1939 to 92 percent in 1941 (table 7), and at the same time number 2 grade raspberries decreased from 40 percent in 1939 to 5 percent in 1941.

This situation alleviates the problem of the Association having to dispose of a poor grade raspberry. It also indicates the growers are recognizing the benefits that do accrue from producing raspberries of better quality.

Table 7. Percent of cases by grades sold to the Association

Year	Special	No. 1	No. 2	No. 3	Total
1939	0	57	40	3	100
1940	1	81	17	.5	100
1941	3	92	5	.08	100
Average					
3 years	1	76	21	1	100

Services Performed by Association. Even though the main function of the Association is marketing the raspberries for its members, the Association performed a definite service for the members in the harvesting season of 1940. An expert was hired to assist the growers to show them how to pick, grade, and handle their berries. This service helped the members a great deal to bring about the production of better quality berries.

The Association sells second hand cases and cups to its members which are returned from berries sent to the cannery. This is in direct opposition to one of the provisions of the marketing contract; however, the cups and cases are in good condition and can be used without resulting in bad effects on the trade. The officers decided that it would not be a good policy to buy a stock of cases and cups to be sold to members, the reasons being storage cost, risks involved, and the high cost of distributing a few cases at a time to growers. The savings would amount to less than one cent a case which did not justify the costs and bother involved. The members of the Association are permitted to purchase cups and cases from either of two companies. The accounts are guaranteed by the Association. The amount is deducted from the payment made to the member of the Association at the end of the pool.

Advertising. Advertising is important in selling a product which has a short bearing season. The average housewife waits until the raspberry season is nearing the peak of production before she begins contemplating the purchase of raspberries. Advertising can perform a definite function by reminding the housewife when the berries will be at their peak of production and when she should purchase her berries for canning.

The Utah Berry Growers' Association has done very little advertising in daily newspapers. In all probability, a small amount of advertising in the daily papers during the peak of production would greatly improve the local market. The strawberry growers found this type of advertising beneficial and effective. There is no reason why it would not be just as effective for raspberries.

The Utah Berry Growers' Association has purchased labels to be pasted on all cases going to the fresh market (exhibit 1). This type of advertising is effective and also economical. This is especially true when applied to berries of extra good quality. People want to know where they come from so they can purchase from the same source the next year.

Analysis of Operation

Production, Acreage, and Yields per Acre. The total deliveries of all kinds of berries grown by members for the three-year period were 95,529 cases (table 8). Raspberries constituted 95 percent of this total production in 1939, 96 percent in 1940, and 98 percent in 1941.

ROBIN HALL LANE

GROWN,
PACKED AND SHIPPED

by

Utah Berry Growers Association

OREM, UTAH



Exhibit 1. An attractive Association label--an effective and economical means of advertising.

Table 8. Production of small fruits by members of the Association

Item	1939	1940	1941	Total
Total deliveries (Case)	31,581	38,004	25,944	95,529
Production per acre (Cases)	192.4	280.6	301.9	
Percent of county production	70	55	45	

- 1/ Includes raspberries, Black Caps, dewberries, and currants
- 2/ These figures actually represent the deliveries per acre rather than production. In the majority of cases the difference would be very slight.
- 3/ Estimated by county agent and officers of the Association

Black Caps, currants, and dewberries decreased in importance each year and in 1941, they constituted only 1.6 percent of the year's total production of berries. Because of their lack of importance, they will not be discussed in this analysis.

Total deliveries of raspberries by members of the Association increased 17 percent from 1939 to 1940 but decreased 46 percent from 1940 to 1941. The Association handled 70 percent of the total production in the county in 1939. This decreased to 55 percent in 1940 and 45 percent in 1941. The decrease in production was due to a decrease in acreage (table 9), and also a decrease in membership as was shown in table 4. The encouraging item is the great increase in average production per acre which was due to the smaller growers plowing up their raspberries, replacing old varieties with new and improved ones, and carrying out better methods of production.

The average production of raspberries per acre by members of the Association was below the average of most other states in 1939.

Table 9. Acreage of small fruits in Association

Item	:1939	:1940	:1941	:Average
Total acres of small fruits	: 164	: 135	: 86	: 128
Average acreage per member	: .83	: 1.15	: 1.28	: 1.09
Percent of county acreage of small fruits:	43	36	23	34

1/ Calculated by using acreage given in 1940 Agricultural Census for Utah, p. 32

However, production per acre since 1939 increased from 280 cases per acre in 1940 to 302 in 1941, an increase of 33 percent over 1939 (table 10).

Table 10. Average production of cases of raspberries per acre in 1939 1/

Area	:Average cases per acre
United States	: 147
Western States	: 231
Utah	: 206
Utah County	: 213
Utah Berry Growers' Association	: 192

1/ All figures except Utah Berry Growers' Association taken from 1940 Census Reports

Thus, the members of the Utah Berry Growers' Association have increased their average production per acre far above that of the nation's average.

Many of the small and inefficient producers discontinued membership with the Association in 1940 and 1941. This left the more efficient producers who had planted new and better varieties. These

are the main factors causing the high yields of raspberries for members of the Association. Contracts signed with members by April 13, 1942 indicate an average, up to date, of 1.56 acres per member.

The total acreage of small fruits grown by members of the Association has been on the decline. Acreage decreased 18 percent from 1939 to 1940 and 36 percent from 1940 to 1941. This can be explained by the fact that the Association is losing some of its former members, and also the low yielding plantations of raspberries are plowed up. The total acreage is decreasing yet the average acreage per member is increasing, which indicates that membership is declining faster than acreage.

Deliveries of Raspberries to Association. The cooperative's marketing function begins when the members bring their berries in to be sold by the Association. The time at which these berries are brought in often influences the efficiency with which the cooperative association can dispose of them. The raspberry season is short and when the raspberries are ripe, they must be picked. If the berries are not picked when ready, they become over-ripe, soft, and mushy and soon lose their value.

The amount delivered on different days of the week by growers varies considerably. In calculating the deliveries of berries by days of the week, all the Sunday deliveries for the entire year were added up, all deliveries for Monday were added up, and so on. By this calculation the sales for each day of the year were obtained.

The day of the week in which the largest amount of raspberries are received by the Association has some effect on its marketing operations. If a larger amount than the market will handle comes in on Friday, a problem of storage arises. Retailers do not like to purchase large quantities on Saturday because they are unwilling to accept the risk of having unsold berries over Sunday. In the majority of cases sales of raspberries are very slow on Saturday because the average housewife buys berries on this day to be consumed only as a fresh fruit for the Sunday dinner. She would rather purchase berries for canning on the first day or in the middle of the week. The largest number of cases are delivered on Monday (table 11).

Table 11. Number of cases and percent of raspberries received by days 1939, 1940, and 1941

Year	Sun	Mon	Tues	Wed	Thur	Fri	Sat
1939	3,968	5,269	3,774	5,279	5,220	5,542	981
Percent	13	18	13	18	17	18	3
1940	2,614	7,154	7,300	5,139	3,697	6,336	4,308
Percent	7	20	20	14	10	17	12
1941	3,848	5,029	3,945	4,008	3,026	2,575	3,120
Percent	15	20	15	16	12	10	12
Total 3 years	10,430	17,452	15,019	14,426	11,943	14,453	8,409
Ave. % 3 years	11	19	16	16	13	16	11

On the average 3 percent more berries was brought in on Monday than any other day. Only 3 percent of the berries delivered during the week was sent in on Saturday in 1939 compared to 12 percent for both 1940 and 1941. In 1939, the Association lacked pre-cooling storage space to hold raspberries over the week-end. This is

perhaps one of the reasons for the small deliveries on Saturday in 1939.

The July Fourth holiday has a definite effect on the marketing of raspberries. In 1939 the season started on June 24 (table 12).

Table 12. Number cases of raspberries received daily by the Association

Date	1939	1940	1941
June 23	0	150	
24	6	506	
25	0	350	
26	50	392	
27	116	511	
28	248	1,005	
29	335	470	
30	559	308	
July 1	0	2,408	96
2	1,357	4,323	276
3	1,019	1,990	368
4	336	246	61
5	2,153	2,579	643
6	2,025	2,123	412
7	1,898	1,734	1,091
8	212	1,950	1,088
9	1,497	1,724	1,268
10	1,602	1,396	1,173
11	1,347	1,466	1,183
12	1,617	1,672	1,347
13	1,786	1,187	945
14	2,156	784	1,477
15	600	1,680	1,293
16	1,112	661	1,238
17	1,869	1,361	1,136
18	1,293	1,262	1,186
19	923	1,031	139
20	756	528	1,627
21	676	187	1,729
22	163	538	1,150
23	0	242	917
24	494	0	162
25	605	212	33
26	325	0	959
27	319	0	864
28	253	0	676
29	0	0	318
30	1	0	309
31	235	0	187
August 1	76	0	113
2	14	0	32
3	0	0	0
4	0	0	56
TOTAL	30,033	36,548	25,551

The raspberries were nearing their peak of production when the Fourth of July holidays came (figure 1). July 1, 2, 3, and 4, Saturday, Sunday, Monday, and Tuesday constituted a four-day holiday as far as raspberries were concerned. This was a problem for the newly formed Association, but they were successful in partially solving it. They picked the berries as they were ready, but instead of putting them on a stagnant, lifeless market, they placed them in cold storage. A normal amount was released on Wednesday so as to maintain the price. However, the surplus berries and low price still presented a problem to test the ability of the manager in disposing of the fruit and clearing a glutted market. The Safeway Stores, in order to eliminate the surplus accumulated over July Fourth holidays, purchased several hundred cases of berries which relieved the accumulated surplus.

In 1940, 8,793 cases of raspberries, 24 percent of the year's production, were delivered to the Association on July 1, 2, and 3 because of an earlier season. This large volume immediately preceding a holiday presented a problem that was new and difficult for the Association. By the second year the Association was in a better position to withstand such emergencies. By 1940, they had established local surplus markets with canning companies as well as markets in Colorado and Wyoming. The surplus of 1940 was disposed of by one cannery purchasing 2,000 cases, large truck loads were sent to Colorado and Wyoming, and large shipments were taken by Safeway Stores and the Wyoming Wholesale Grocery Company. These out of state shipments improved the local market. Had this large

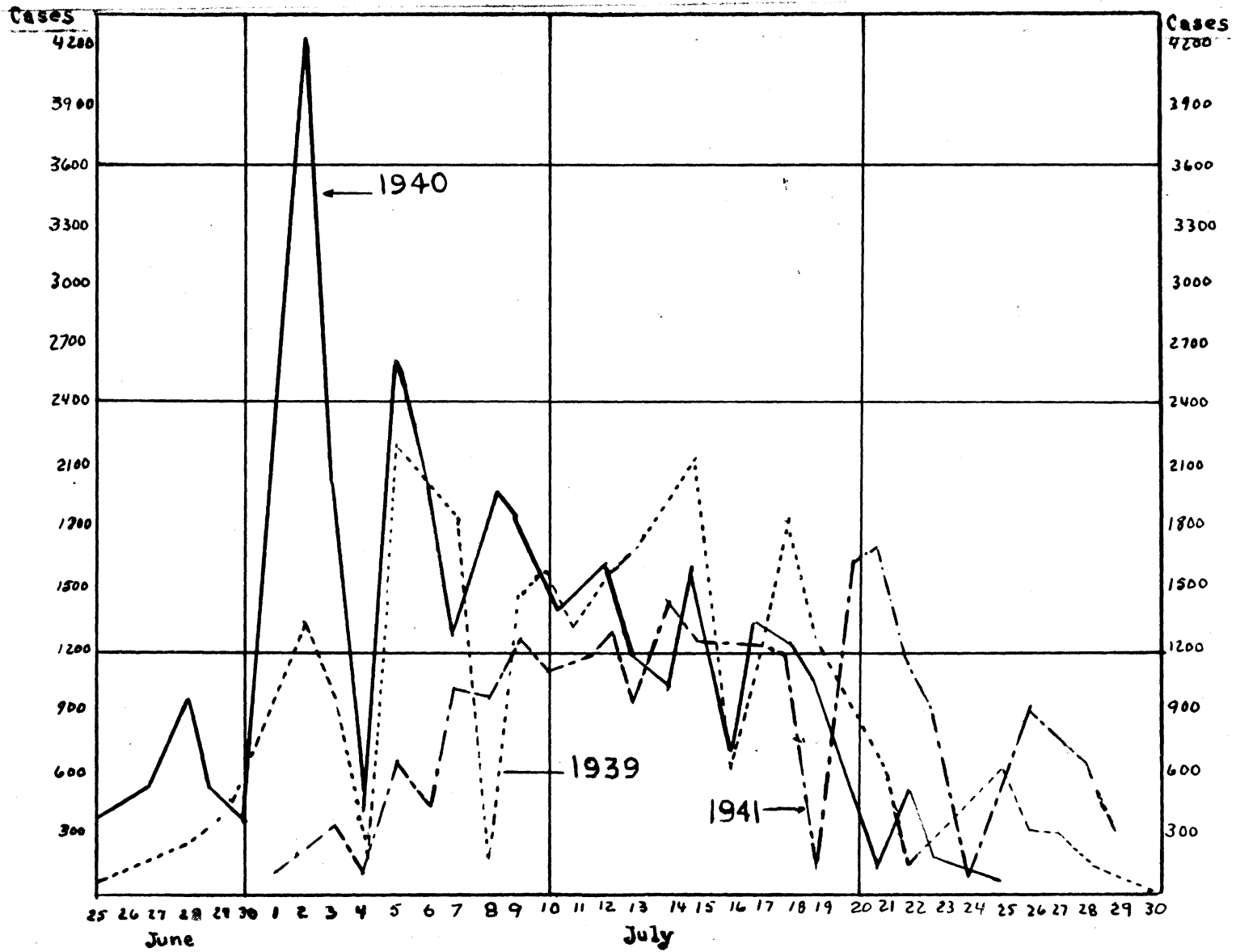


Figure 1. Number of cases of raspberries received by the Utah Berry Growers' Association by days, 1939-41

quantity been placed on the local market, the results would have been disastrous. The selling activities caused the local market to function normally with no rapid decline in price.

In 1941, the production season was later. None of the berries were harvested before July 1. This eliminated the problem of having a holiday near the peak of production as in 1939 and 1940.

The fluctuations in the daily amounts delivered to the Association are very great as shown in figure 1. Deliveries of berries varied from 100 to 4,000 cases per day. With such fluctuation of supply, lack of dependability, and wide variations, the problem of marketing raspberries is made more difficult because future planning is impossible.

Sales. Soon after the Association was organized in 1939, the board of directors began to look around for likely markets. They realized that the local market could not handle the entire crop at a satisfactory price to the growers. A letter of inquiry was sent to retail stores in Colorado and Wyoming. This letter stated that the Association had raspberries for sale and that the season would begin about the last of June, and asked if they would be interested in receiving some berries. Some favorable replies were received from these letters of inquiry.

In order to facilitate better distribution and promote sales, one representative was sent to Wyoming and another to Colorado to take charge of the sales in these areas. After about a week, the representative in Wyoming was called home because sales could be made directly to retail stores. Later on in the season the

Pacific Produce Company was induced to handle all sales in Wyoming, Idaho, and some in Utah, rather than the Association dealing directly with each retail store.

The representative who was sent to Colorado made connections with a brokerage firm in Denver. This representative stayed there for the first year to assist the broker in the sale of raspberries sent there by the Utah Berry Growers' Association. At the end of the first year the representative was called back and the broker handled all the sales to Colorado.

Sales of Raspberries to Various Channels of Distribution. The amount sold to different channels of distribution varied somewhat during the three years (table 13).

Table 13. Number of cases disposed of through the various agencies

Agency	: 1939	: 1940	: 1941	: Total for : 3 years
Sales retailers	: 7,118	: 6,657	: 7,450	: 21,225
Canning companies	: 3,468	: 12,943	: 4,619	: 21,030
Broker	: 4,220	: 3,672	: 2,392	: 10,284
Salt Lake Public Market	: 2,284	: 3,308	: 1,966	: 7,558
Wholesaler	: 272	: 4,663	: 1,668	: 6,603
Frosted Fruit	: 0	: 0	: 3,810	: 3,810
Others 1/	: 12,671	: 5,305	: 3,646	: 21,622
Total Sales	: 30,033	: 36,548	: 25,551	: 92,132

1/ Sales to truckers, peddlers, and sales at the plant

In 1939, the main outlet for raspberries was "others" which means truckers, commission men, and cash sales at the plant. In 1939, these sales amounted to 42 percent of the total sales. This large amount was sold through this channel because commission men were forced to buy from the Association.

As shown in table 13, "others" received the greatest total cases for the three years. This method of sale declined 71 percent from 1939 to 1941. This was due to more outlets being developed and more of the truckers and commission men purchasing from producers outside of the Association.

Of the 21,225 cases received by the retailers during 1939-1941, 98 percent was taken by the Safeway Stores. This outlet was stable with sales remaining about the same for the period (figure 2). Chain stores are fast becoming an important outlet for raspberries in the state. During the three years of operation of the Utah Raspberry Growers' Association, they sold an average of 23 percent of their raspberries to the Safeway Stores. These berries are shipped to the Safeway warehouse in Salt Lake City and from there distributed to Safeway retail stores in Utah, Colorado, Wyoming, and Idaho. Some of the express shipments are bought f.o.b. Orem, others f.o.b. Salt Lake warehouse. The Pacific Produce Company, as a wholesaling agency for retail stores in Wyoming, Utah, and Idaho, is developing into a favorable outlet for Utah raspberries. This organization purchased an average of 7 percent of total sales for the three-year period.

In 1939, a connection was developed with a broker in Denver, Colorado to take care of the shipments of raspberries in this state. This market serves as an outlet for fresh raspberries during the peak season of production. This market received an average of 10 percent of the total sales for the three years.

The Pleasant Grove Canning Company in Pleasant Grove and the

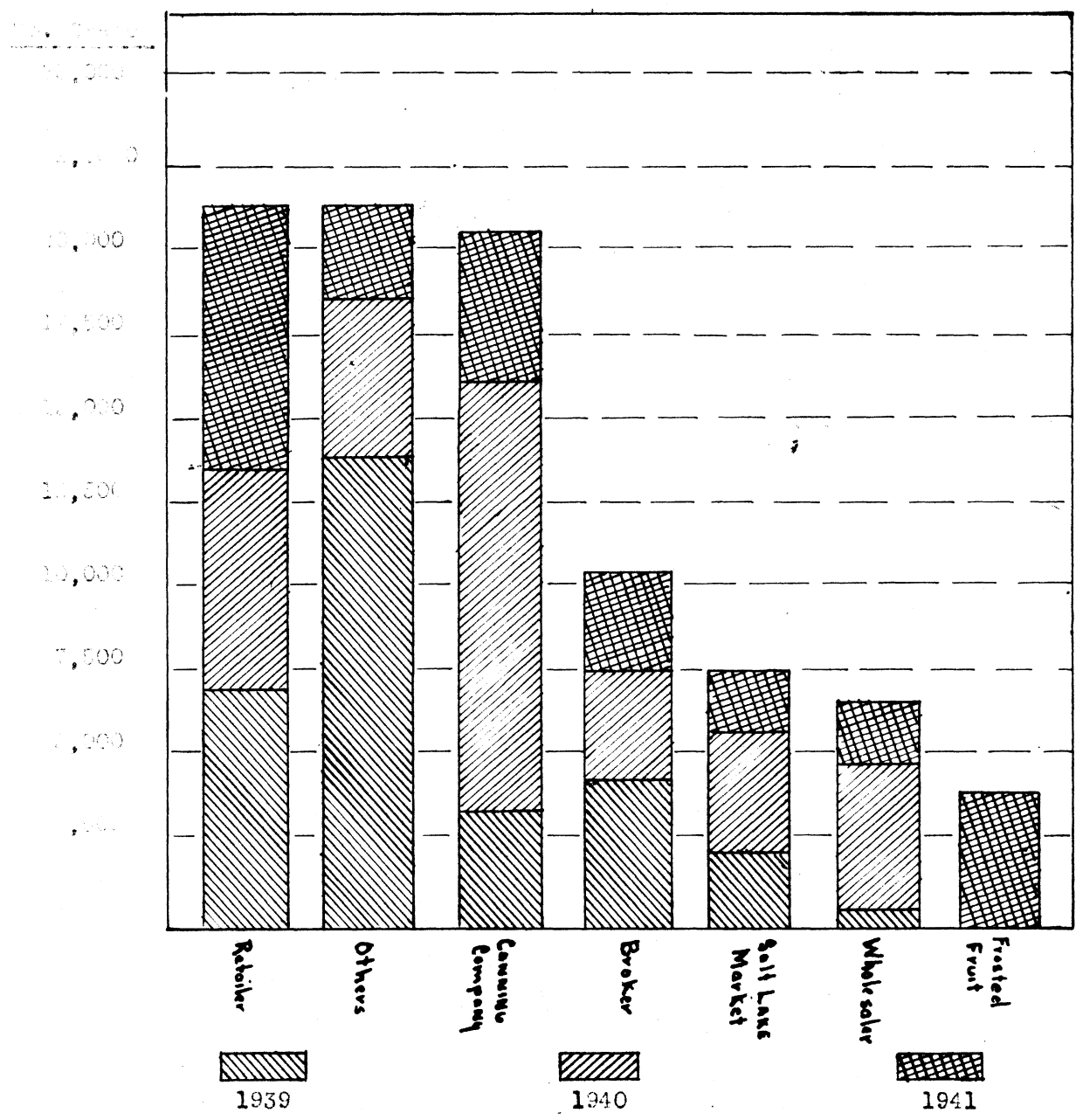


Figure 2. Number of crates of raspberries sold through various channels by Utah Berry Growers' Association, 1939-41

Hewlett Brothers Company in Salt Lake serve as a needed surplus market for raspberries which cannot be placed on the fresh market. This outlet takes care of the over-supply during the peak of production or when the market is over-crowded. During the three-year period the canning companies purchased 23 percent of total sales. In 1941, the Association sold 46,188 pounds to the Pleasant Grove Canning Company for \$0.085 a pound. The cannery packed the berries in 30 pound cans, furnished the cans, did the work, paid the freezing and drayage costs, and sold them back to the Association for \$0.10 a pound. The Association then sold the 875, 30 pound cans of raspberries to the Puritan Pie Company in Denver, Colorado for \$0.10 a pound. This market proved very satisfactory in disposing of the surplus production during the periods when the fresh market was inadequate to take care of the production. Thus, Colorado serves as a fresh market and also a market for cold pack raspberries.

In 1941, a market was established with the Los Angeles Frosted Fruit Company as an outlet for Utah raspberries in California. The Frosted Fruit Company contracted for a definite number of pounds of raspberries at a flat rate of \$0.10 per pound and in 1941, 15 percent of the sales was sold to this agency.

The largest produce marketing facility in Utah is the Growers' Market Company, commonly called the Salt Lake Public Market. The market contains two long rows of sheds and on either side of the sheds are located the stalls. These stalls are rented out to farmers, private dealers, marketing associations, and others for

a fee of \$1.00 or more, depending upon the location of the stall, This market serves as a source of supply for Salt Lake wholesalers, retailers, and consumers. Peddlers often buy produce from here and take it to surrounding communities. This market is very sensitive to a very small surplus. Moses L. Holbrook, who has been connected with the market for the past 46 years, says, "that oftentimes a surplus of 5 percent will cut the prevailing prices at least 25 percent." This condition causes the price to fluctuate greatly, especially during the peaks of production. The amount sold in the Salt Lake Public Market varied somewhat. Shipments increased from 2,284 cases in 1939 to 3,308 cases in 1940 but decreased to 1,966 cases in 1941. In addition to this amount several hundred cases were taken to the Salt Lake Public Market in 1940, but due to over-supply on the market, they had to be sold to the cannery.

In 1941, a new outlet in California was established with the Frosted Fruit Company. They purchased 3,810 cases, 15 percent of the 1941 crop of raspberries.

Sales to the wholesaler, which was the Pacific Produce Company, increased very rapidly from 1939 to 1940; however, it decreased from 4,663 cases in 1940 to 1,668 cases in 1941.

Price Received from Sales through Channels of Distribution. The net price received from the channels of distribution varied somewhat during the three years (table 14). The wholesaler paid the highest price in 1939 and 1940. Retailers paid next highest price in 1939 with prices received from truckers and commission men coming next. Returns from the broker in 1939 were low because of a few bad shipments and the high brokerage costs. In 1940, the

broker returned the second highest price and in 1941, the highest. Because of the low price in 1939, the average returns received for the three years were considerably below the price from other channels of distribution.

Table 14. Average price received per case by channels of distribution

Agency	1939	1940	1941	Average for 3 yrs.
	Dollars	Dollars	Dollars	Dollars
Retailers	.87	.85	1.19	.97
Wholesaler	.93	.89	1.19	1.00
Broker	.69	.88	1.20	.923
Canning companies	.40	.60	.85	.616
Salt Lake Public Market	.75	.60	1.16	.886
Others	.80	.81	1.19	.933
Frosted Fruit	0	0	.92	
Average	.776	.742	1.085	.879

Returns from the Salt Lake Public Market were fair in 1939, being \$0.026 less than the average price received for 1939. The year, 1940 was a low year for this market, the return being only an average of \$0.60 per case. The favorable climatic conditions which prevailed in 1940 increased production. This increased production resulted in a great over-supply on the Salt Lake Public Market. In 1941, because of improved general conditions and greater demand at the public market, the price received was \$1.16 per case. This was \$0.08 more than the average price the Association received in 1941. The daily price received from sales on the Salt Lake Public Market fluctuated from the lowest to the highest (figure 3).

The canning companies paid a flat rate of \$0.40 per case in 1939, \$0.60 in 1940, and \$0.85 in 1941.

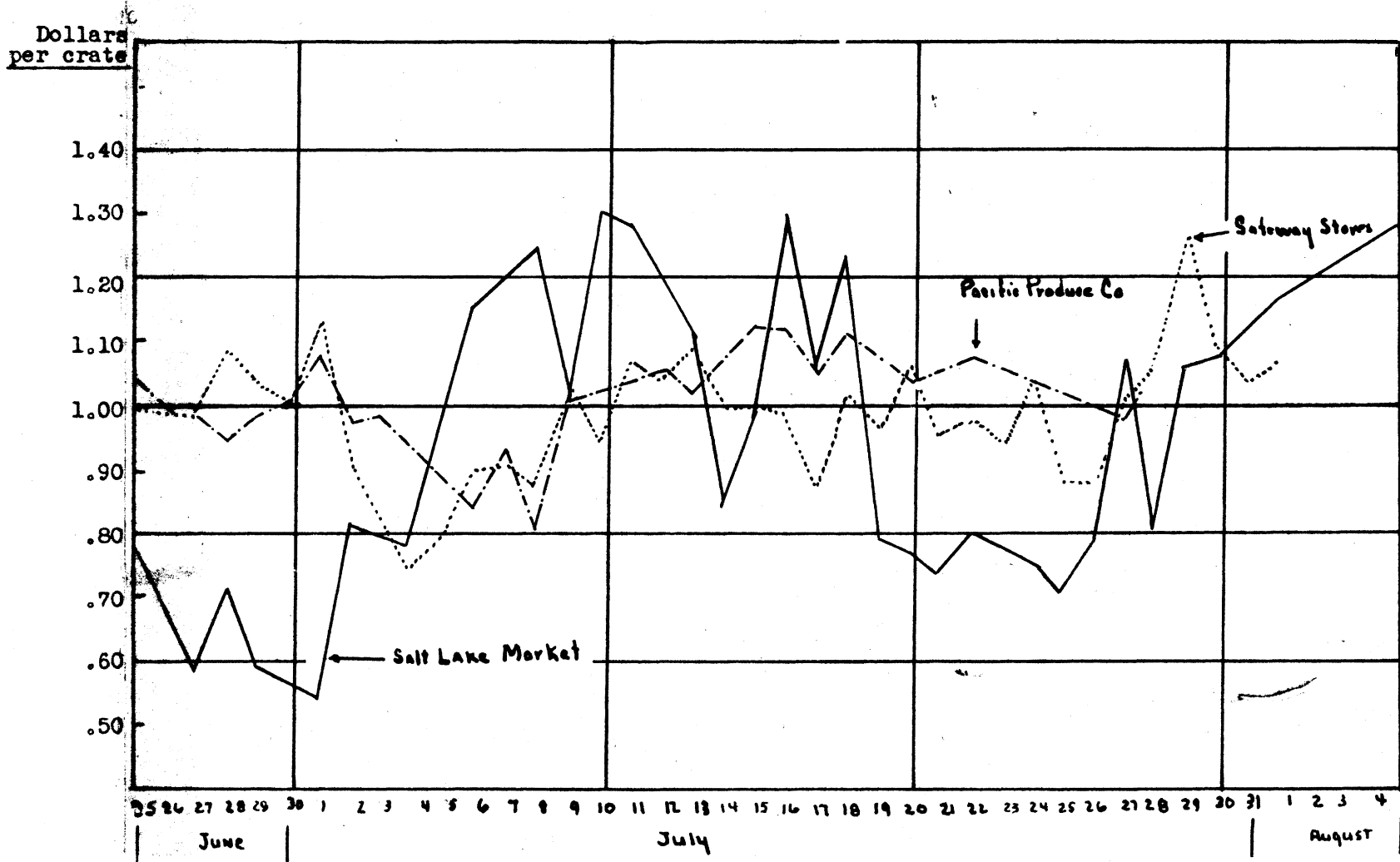


Figure 3. Average daily price received for raspberries by channel of distribution, Utah Berry Growers' Association, 1939-41

The wholesaler paid the highest average price for the three years. The wholesaler returned to the growers an average price of \$1.00 per case. This was followed closely by the retailers, who returned \$0.97 per case to the Association. Sales to truckers, cash sales at the plant, and sales to commission men returned an average of \$0.93 a case to the Association. The berries sent to the Salt Lake Public Market returned an average of \$0.84 per case compared to the total average of \$0.88. This difference is partially due to the wide fluctuation of price received and also to the high cost of selling on the market.

The value of raspberries sold in 1939 was greatest from sales to "others", amounting to \$10,811 (table 15). The largest receipts were from the canning companies in 1940 and retailers in 1941.

Table 15. Value of raspberries sold to various agencies

	1939	1940	1941	Total
	Dollars	Dollars	Dollars	Dollars
Retailers	6,227	5,685	8,840	20,752
Canning companies	1,387	7,581	3,926	12,894
Broker	2,919	3,225	2,870	9,013
Wholesaler	253	4,166	1,997	6,416
Salt Lake Public Market	1,716	1,998	2,278	5,991
Frosted Fruit	0	0	3,490	3,490
Others	10,811	4,311	4,344	19,466
TOTAL	23,313	26,965	27,744	78,022

Table 16 shows the relative importance of the various channels of distribution from the standpoint of percent of total cases of raspberries received in comparison to the percent of total amount paid. Sales to "others" in 1939 account for 42 percent of the

total sales for that year and 46 percent of the total amount paid for berries. The canning companies purchased 35 percent of total sales in 1940, yet they only accounted for 29 percent of total receipts. In 1941, retailers purchased 29 percent of the raspberries and paid 32 percent of the total amount received for the sales.

Table 16. Comparison of percent of total cases sold and percent of total value received from each of the agencies

Item	1939	1940	1941	Average 3 years
	Percent	Percent	Percent	Percent
Retailers				
Percent of total cases	24	18	29	23
Percent of total value	27	21	32	27
Wholesaler				
Percent of total cases	1	13	7	7
Percent of total value	1	15	7	8
Broker				
Percent of total cases	14	10	9	10
Percent of total value	13	12	10	12
Canning companies				
Percent of total cases	12	35	18	23
Percent of total value	6	29	14	17
Salt Lake Public Market				
Percent of total cases	8	9	8	8
Percent of total value	7	7	8	8
Frosted Fruit				
Percent of total value	0	0	13	4
Percent of total cases	0	0	15	4
Others				
Percent of total cases	42	15	14	23
Percent of total value	46	16	16	25
Total Sales				
Percent of total cases	100	100	100	100
Percent of total value	100	100	100	100

Distribution of Raspberries by States. Utah serves as the major market outlet for raspberries sold by the Association (figure 4). During 1939, 22,275 cases of the total 30,033 cases were sold within the state (table 17). Colorado and Wyoming are of equal importance as an outlet for raspberries. ^{5/} In 1939, the

^{5/} This does not include 4,618 cases put in cold pack, sold to the Pleasant Grove Canning Company and indirectly to the Puritan Pie Company in Denver, Colorado.

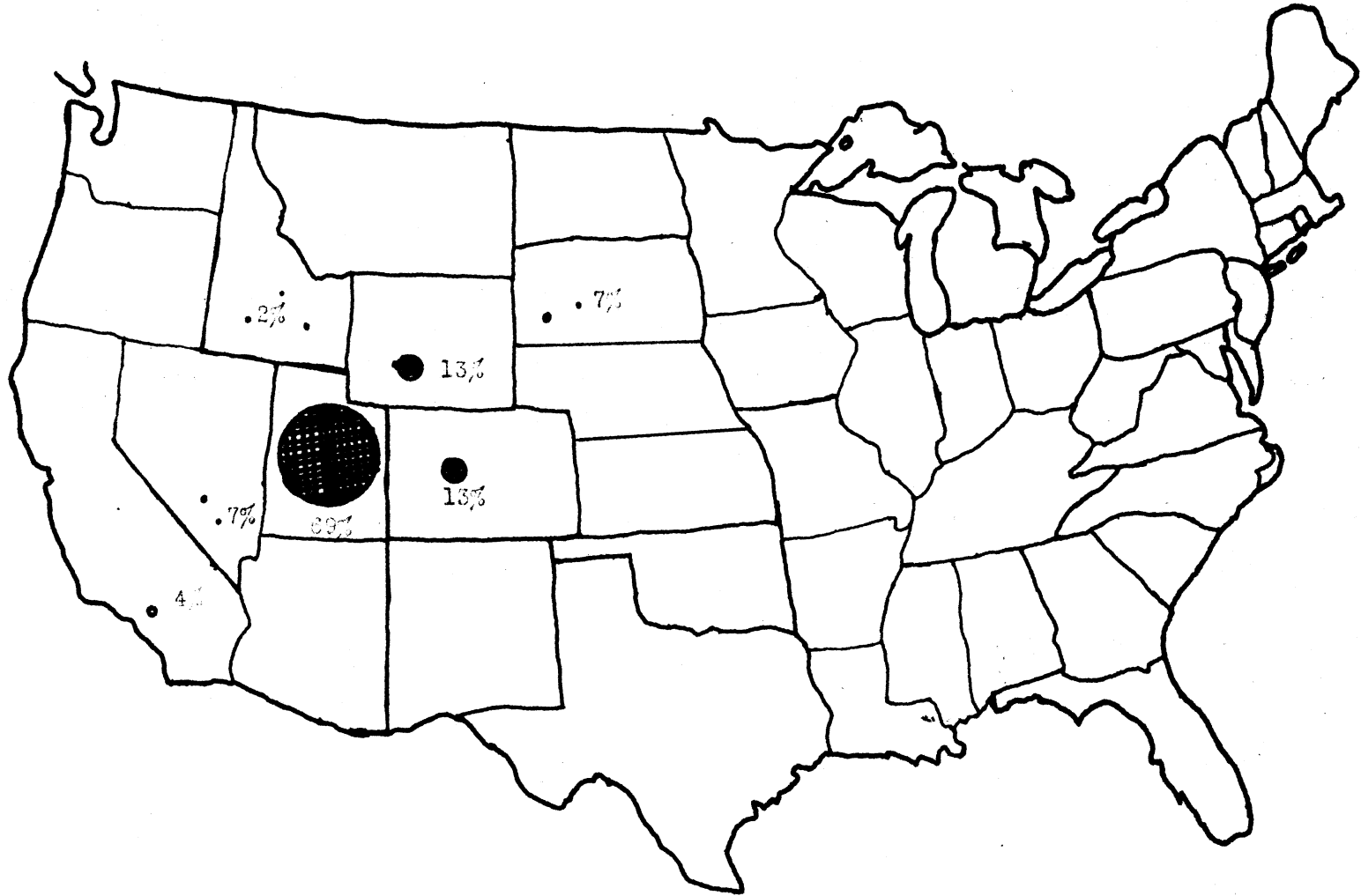


Figure 4. Distribution of raspberries from Utah Berry Growers Association, 1939-41

Association shipped 4,709 cases of raspberries to Colorado compared to 2,441 cases to Wyoming.

Table 17. Number of cases of raspberries sold by states

	1939	1940	1941	Total 3 years
Utah (Cases sold)	22,275	26,798	14,594	63,667
Colorado (Cases sold)	4,709	3,672	3,610	11,991
Wyoming (Cases sold)	2,441	6,022	3,190	11,653
California (Cases sold)	0	0	3,810	3,810
Nevada (Cases sold)	111	0	83	194
Idaho (Cases sold)	18	21	104	203
Nebraska (Cases sold)	479	35	100	614
Total cases sold	30,033	36,548	25,551	92,132

In 1940, as shown in table 17, the situation was reversed. Colorado received 3,672 cases of raspberries and Wyoming received 6,022 cases, or about twice as many as Colorado. Only a small number of cases was shipped to Idaho, Nevada, and Nebraska. In 1939, an experimental truck load of 479 cases was sent to Nebraska. This load netted the Association \$0.74 a case after all expenses were paid. Experience with this shipment of berries properly pre-cooled was entirely satisfactory. This is an indication that other markets are available if the need for them arises. However, all local and nearby markets should be developed to their full capacity before markets at great distances are anticipated. This is on the assumption that a nearby market, fully developed, will yield the highest net returns.

The prices received in the different states vary considerably. In order to make a fair comparison between the prices received in each state, the sales of raspberries in Utah will be divided into sales to canning companies and sales to all other outlets.

The price received for berries sent to canning companies was much lower than the price received for berries sent to other channels because, in the majority of cases, the berries of lower grade and quality were sent to the canning companies.

The highest price per case was received from sales to markets in Idaho and Nevada (table 18).

Table 18. Net prices received per case by states

State	1939	1940	1941	Average
	Dollars	Dollars	Dollars	Dollars
Utah				
Canneries	.40	.60	.85	.63
Other than canneries	.85	.83	1.26	.98
Colorado	.68	.88	1.23	.93
Wyoming	.87	.83	1.20	.97
Nevada	.90	0	1.25	1.07
California	0	0	.92	.92
Idaho	1.00	.91	1.30	1.18
Nebraska	.74	1.00	1.25	1.00
Total average	.76	.75	1.09	.946

The reason for this is probably due to a few express shipments of high grade berries. Of the major market areas for Utah raspberries, sales to the fresh market in Wyoming brought the highest returns in 1939. Sales in Utah were next with \$0.85 a case. Sales in Colorado in 1939 only returned \$0.68 per case. In 1940, the highest price received by the Association was \$0.88 per case paid by markets in Colorado while markets in Utah and Wyoming paid \$0.83 per case. In 1941, fresh markets in Utah paid the highest price of \$1.26 per case, followed by fresh markets in Colorado and Wyoming paying \$1.23 and \$1.20 respectively. California markets received 15 percent of the total sales in 1941, yet sales through this outlet only.

netted the Association \$0.92 a case.

The price received from raspberries sent to Colorado markets shows the greatest improvement over the three-year period, increasing from the lowest in 1939 to very near the top in 1941. Price received from sales to Wyoming markets only increased \$0.33 over the three-year period. Price received from sales to the California market in 1941 was \$0.28 a case less than sales to any other channel of distribution except the canning companies. However, the berries sent to the California market were equivalent in quality to the berries sold on the fresh markets in the other states.

Sales and Price Variation by Days of the Week. The purpose of this section of the discussion is to determine if there is any correlation between the amount of total sales on a certain day of the week and the price received for that same day. The Monday sales are ascertained by adding the total sales for every Monday in the season. The same process is followed for each day of the week and the average price received on each day is calculated by the same method.

The sales by days of the week vary from a high of 19 percent of total sales on Tuesday to a low of 10 percent on Friday (table 19). The sales on Tuesday are the highest in all channels of distribution except sales to the Salt Lake Public Market. Sales to this market are lowest on Tuesday because the berries are shipped to other markets on that day. Shipments to Safeway Stores on Saturday are less than any other day. This indicates that Safeway Stores probably buy on Sunday for Monday's business, resulting in a better price on Sunday. The large deliveries made on Monday have to be

sold within a day's time, thus making Tuesday the day of greatest sales for the week.

Table 19. Percent of weekly sales by days to channels of distribution and average price received, averages 1940-41

Agent		Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total % for week
Safeway	Price	1.17	.95	.92	.98	1.04	1.00	.88	
	Percent of total	12	13	21	17	7	21	8	100
Broker	Price	.96	.86	.88	.74	1.02	.89	.75	
	Percent of total	10	9	26	5	14	10	26	100
Salt Lake Public Market	Price	0	.71	.90	.92	.88	.90	1.01	
	Percent of total	0	33	7	12	12	22	11	100
Canning companies ^{1/}	Price	0	0	0	0	0	0	0	
	Percent of total	6	12	21	19	8	14	19	100
Average for all agencies		9	17	19	13	10	17	16	100
Average price		1.06	.84	.90	.88	.98	.93	.88	

^{1/} Price contracted each year, 1939, \$0.04 a pound; 1940, \$0.06 a pound 1941, \$0.085 a pound

The average price paid on Sunday is the highest in the majority of cases probably because these berries are to be used for the early Monday morning trade.

A general statement regarding the sales by days and price received would be that there is very little correlation between the amount sold to these various agencies and the price received.

Trend of Price Through Harvest Season. The average price received by days of the month in the various states is quite different. This emphasizes the point that each state comprises an entirely different market (figure 5). Utah's average price decreases rapidly during the July 4 holidays, which indicates that the surplus was disposed of in Utah through the canners and surplus markets while the amount that

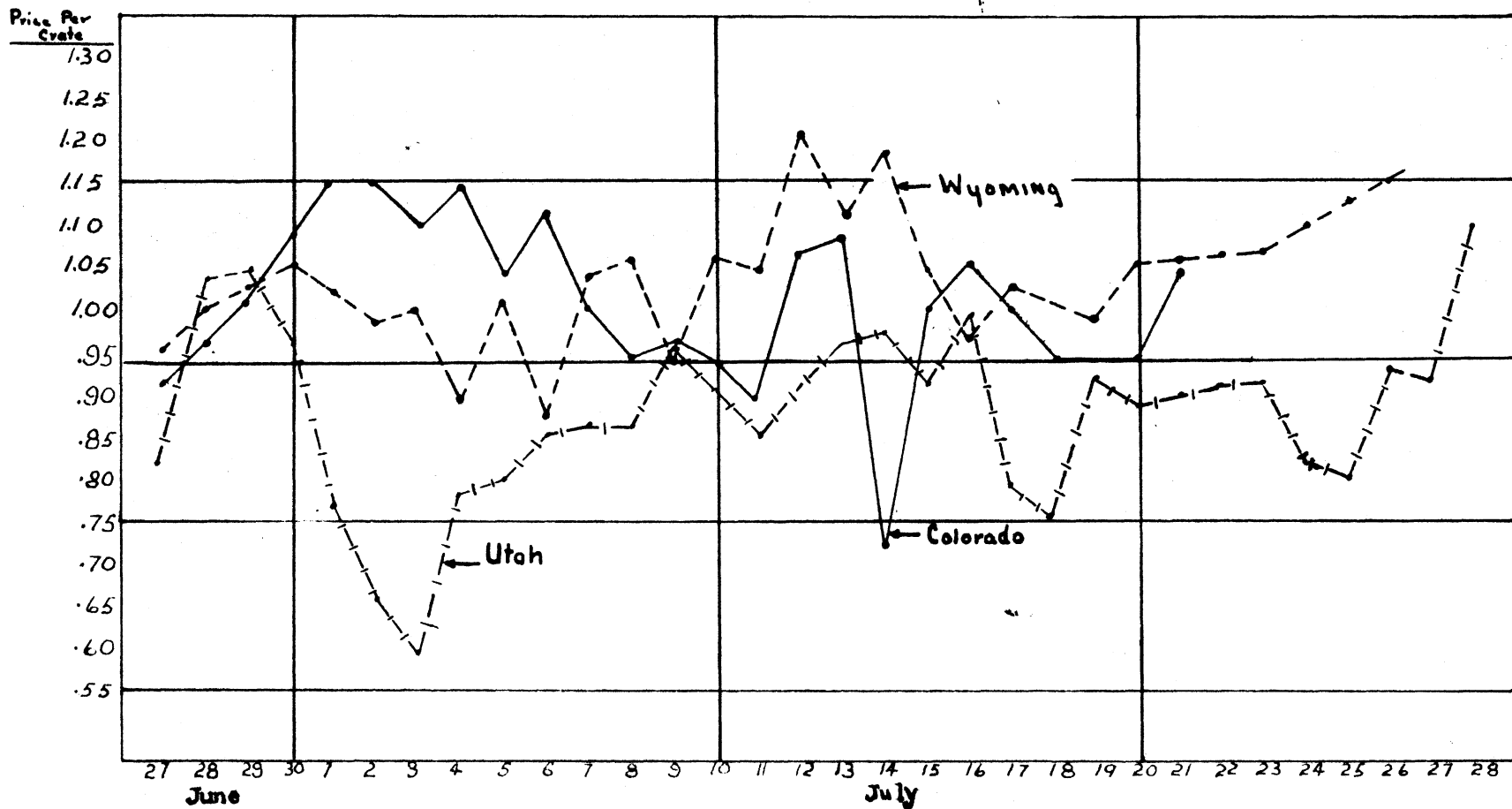


Figure 5. Average daily price received for raspberries sold in Utah, Colorado, Wyoming by Utah Berry Growers' Association, 1939-41

was sent to Colorado and Wyoming was sold on the fresh market. The day by day averages of Utah's price is below that of Wyoming or Colorado because the amount sold to canning companies and on the Salt Lake Public Market is included in the total for Utah. The sudden decrease in price in Colorado on July 15, as shown in figure 6, is caused by the carload of berries that brought \$0.59 a case in 1939 because they were partly spoiled.

The largest percentage of raspberries was sold in Utah on Tuesday, Saturday in Colorado, and Wednesday in Wyoming (figure 6). The highest price received in Colorado is on Thursday, Friday in Wyoming, and the same on Sunday, Monday, and Thursday in Utah (table 20).

Table 20. Percent of sales by days and average price received

	Sun	Mon	Tues	Wed	Thur	Fri	Sat	Total
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Utah	11	13	21	16	15	18	16	100
Price	.91	.91	.79	.90	.91	.85	.76	
Colorado	14	13	23	10	7	8	25	100
Price	1.05	.95	1.00	.95	1.19	1.15	.81	
Wyoming	15	10	13	27	12	10	7	100
Price	1.02	1.02	.98	.96	.99	1.05	1.10	

In Utah the amount sold each day has a direct effect on the average price received. The largest percent is sold on Tuesday and the lowest price is received on that day. The highest is received on days of lowest sales, except Saturday. The largest amount of berries is sold to the canning companies on Tuesday which partially accounts for the low price on that day. In Colorado sales on Thursday bring the highest price. Price on Saturday is the lowest and the percent of

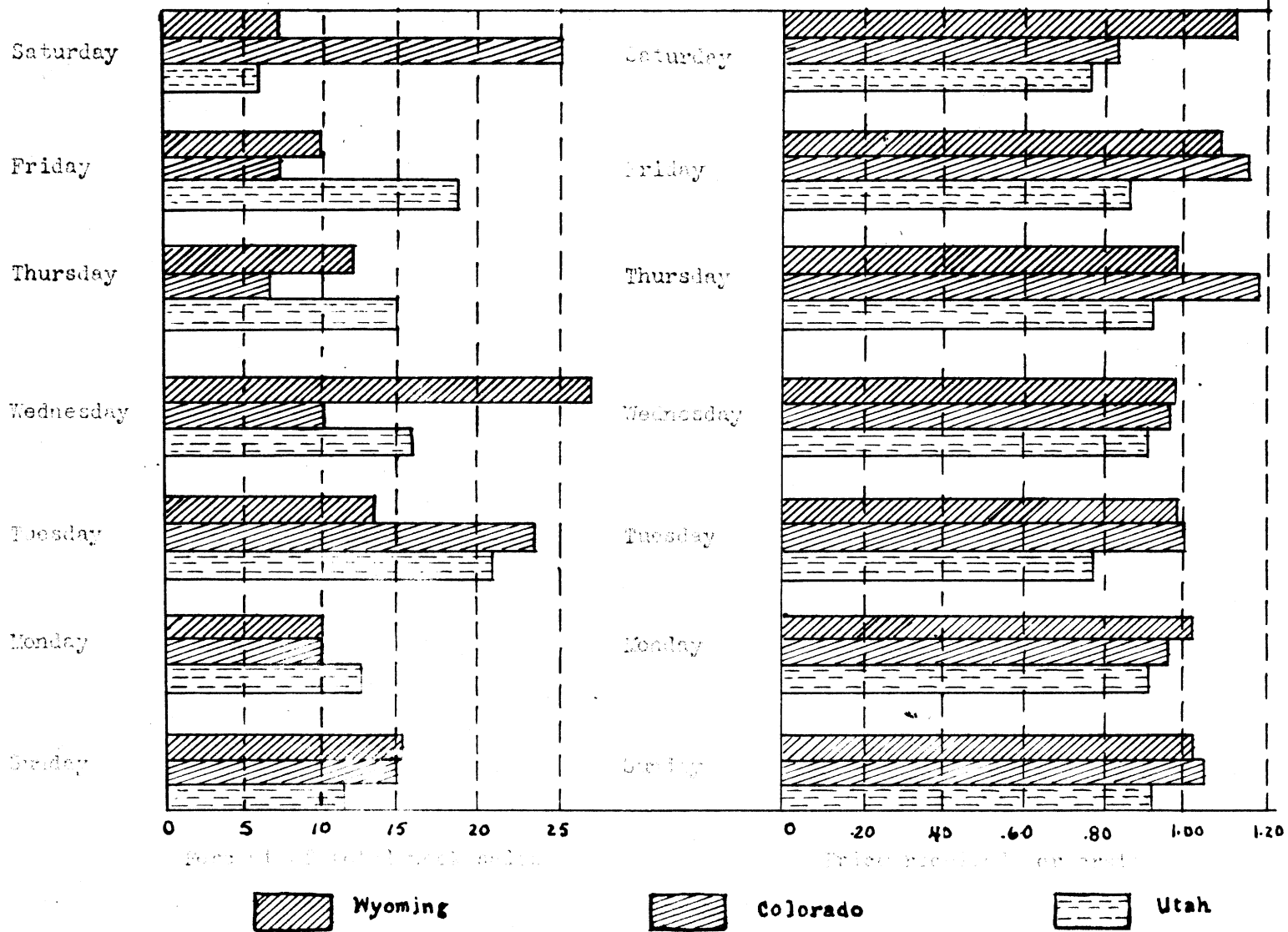


Figure 6. Average percent of raspberries sold by day of week in Utah, Colorado, and Wyoming and average price received, Utah Berry Growers' Association, 1939-41 average

sales is the greatest. In Wyoming, Wednesday is the day of the largest shipments which accounts for the lowest price.

In 1939, the price of raspberries was materially affected by July 4 celebration (figure 7). The large deliveries just preceding the July 4 holidays caused an immediate decrease in price. This price did not go back to normal until after the surplus accumulated by the four-day holiday had been disposed of. The general price level increased until July 12, then declined to the end of the season. The deliveries fluctuated a great deal with most of the low periods coming once a week on Saturday.

In 1940, (figure 8) the production was very large preceding July 4 holidays; however, this huge production did not affect the price as adversely as the year before. More outlets had been established to take care of this surplus. The general price level did not increase after the Fourth as it did in 1939, but remained relatively constant until July 15, then declined.

The general trend of prices in 1941 (figure 9) declined from the beginning of the season. The period of production was much later due to a late spring. This eliminated the problem of surplus production over July 4 holidays. The price was affected very little but deliveries were affected materially by a state holiday on the 24th followed by Sunday, July 25. The price received on July 24 was above average due to shipments out of the state to fresh markets. Because of low receipts for two days in succession, berries were not available for the fresh market. The entire sales on the 25th were made to canning companies and the Frosted Fruit Company which accounts for the price on the 25th being the lowest of the season.

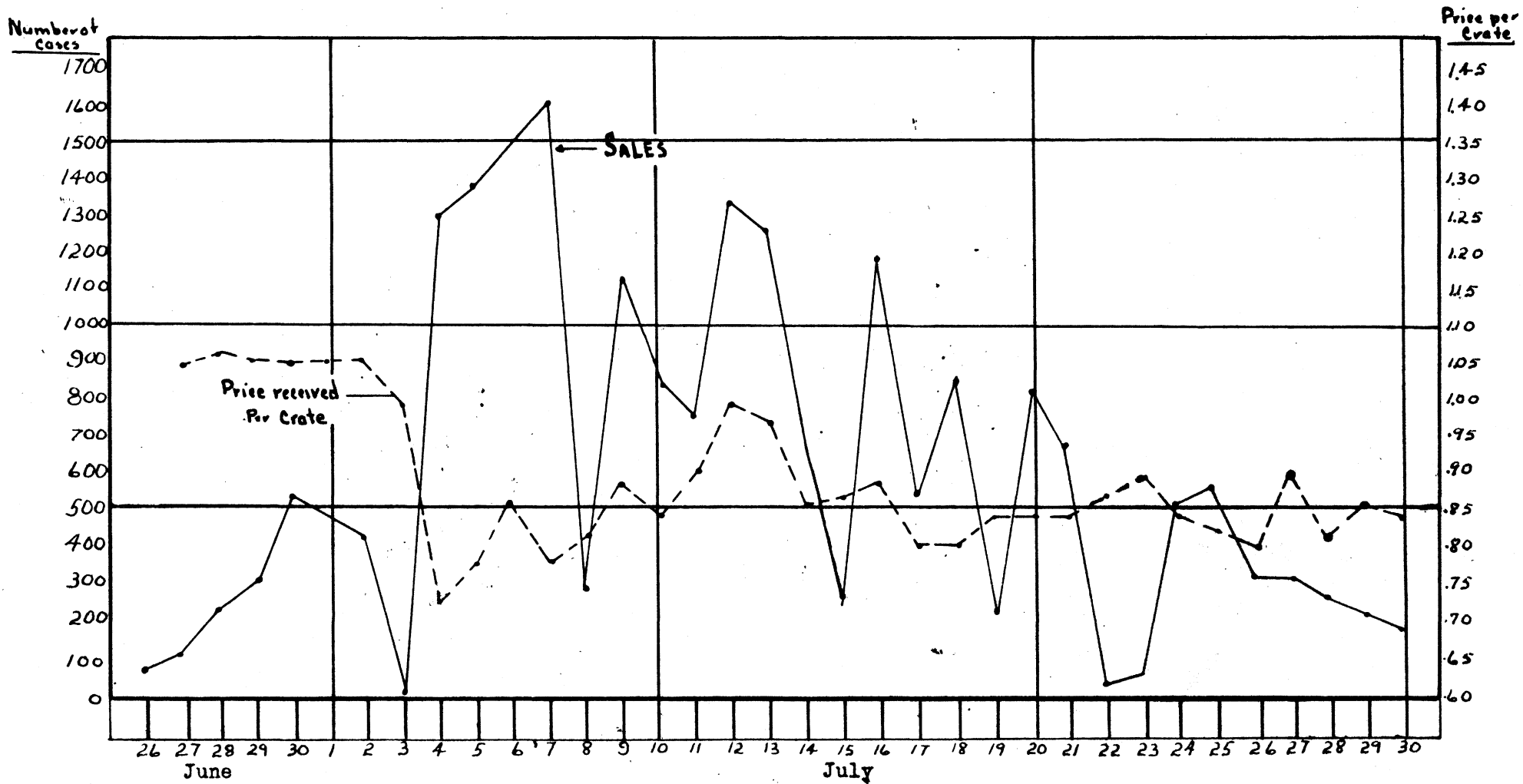


Figure 7. Daily sales and average daily price received for raspberries by Utah Berry Growers' Association, 1939

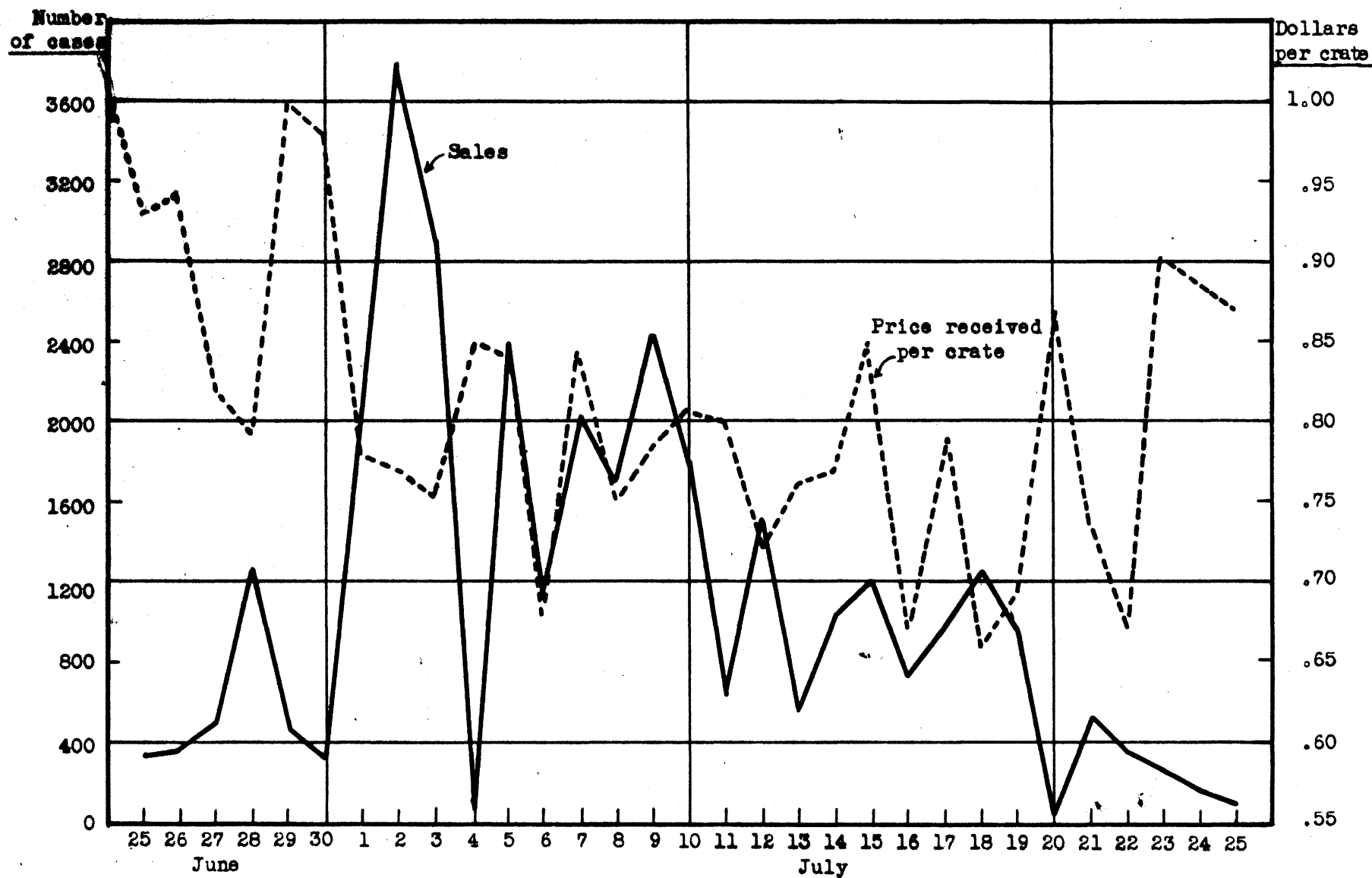


Figure 8. Daily sales and average daily price received for raspberries by Utah Berry Growers' Association, 1940

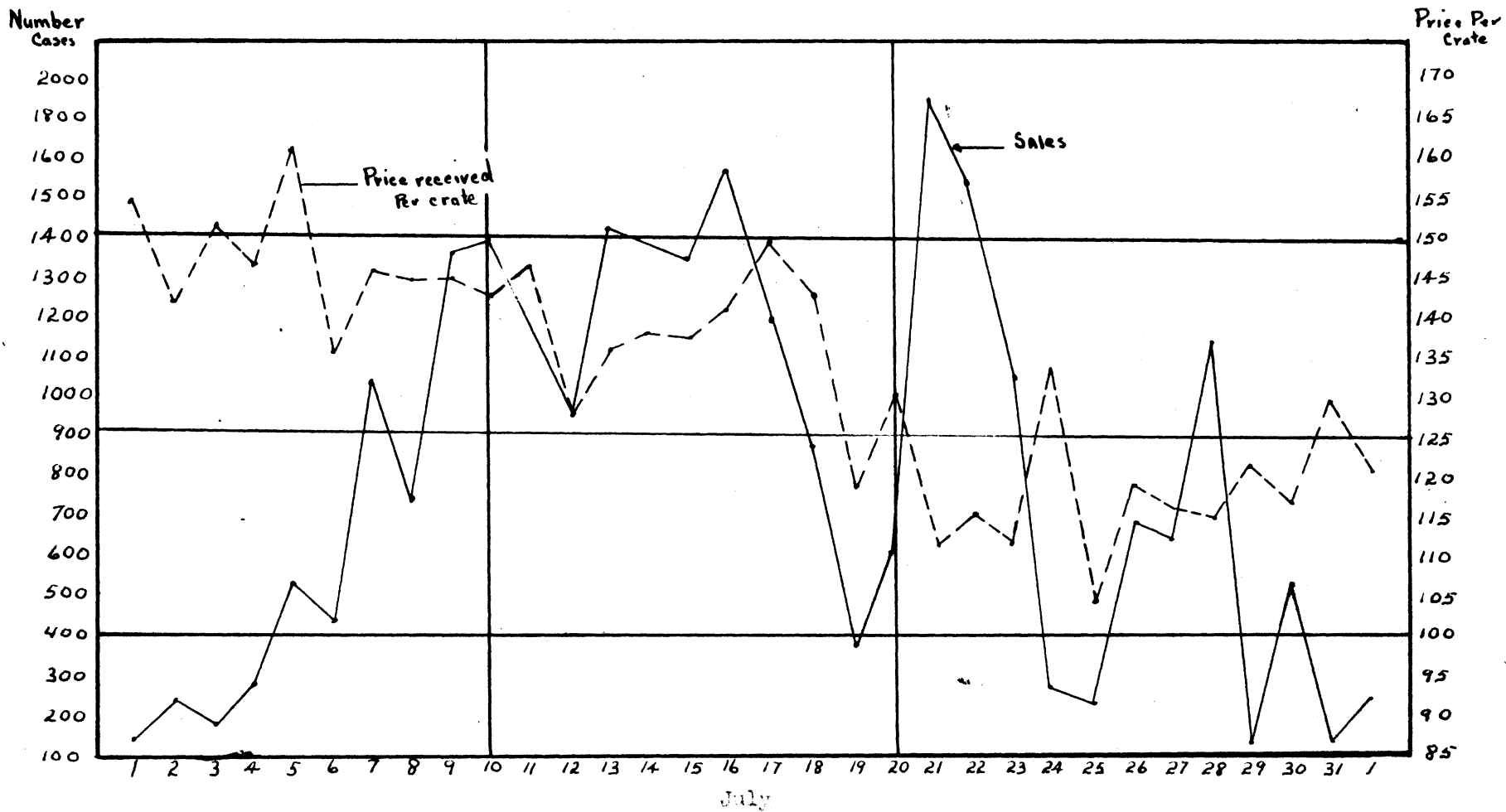


Figure 9. Daily sales and average daily price received for raspberries by Utah Berry Growers' Association, 1941

Marketing Expenses. The expenses of the Association varied during the three years (table 21).

Table 21. Total expenses of the Utah Berry Growers' Association, 1939-1941

	: Total	: Total	: Total	: Total
	: 1939	: 1940	: 1941	: 3 years
	: Dollars	: Dollars	: Dollars	: Dollars
Wages and salaries	: 753.85	: 814.85	: 790.70	: 2,359.40
Hauling	: 401.31	: 1,685.73	: 464.14	: 2,551.18
Office expense	: 69.24	: 20.62	: 49.59	: 139.45
Telephone and telegraph	: 14.35	: 59.15	: 50.31	: 123.81
Rent	: 25.00	: 25.00	: 25.00	: 75.00
Storage	: 80.16	: 6.06	: 0	: 86.22
Cooler	: 0	: 821.56	: 0	: 821.56
Miscellaneous	: 113.90	: 33.50	: 163.85	: 311.25
Total	: 1,457.81	: 3,466.47	: 1,543.59	: 6,467.87

One of the reasons for this variation was that in 1940 the majority of shipments was made by trucks. This hauling expense was listed in the total expenses for the Association. In 1939 and 1941, the majority of the sales was f.o.b. Orem or the transportation charges were deducted before the returns were made to the Association. This accounts for the \$1,685 hauling cost in 1940 as compared to a little over \$400 for 1939 and 1941.

The miscellaneous expenses were high in 1939 because of the purchase of nails and slats to load the rail car shipments and other miscellaneous expenses which occur the first year of operation. A bank note of \$57.00 and a bad check of \$65.00 were included in the miscellaneous expenses for 1941. These items should have been charged to a profit and loss account rather than charged as a miscellaneous expense of marketing.

A better comparison is obtained by reducing the individual items to an expense per case basis (table 22).

Table 22. Expenses per case of delivered raspberries to the Association, 1939-1941

Expenses	Cents per case			Average 3 years
	1939	1940	1941	
Wages and salaries	2.38	2.13	3.04	2.46
Hauling	1.27	4.41	1.78	2.66
Office Expenses	.22	.05	.19	.15
Telephone and telegraph	.04	.15	.19	.13
Rent	.08	.06	.09	.08
Storage	.25	.02	.00	.09
Cooler	.00	2.15	.00	.85
Miscellaneous	.36	.01	.63	.32
Total	4.62	9.07	5.93	6.74

Wages and salaries increased about one cent a case in 1941 above the preceding years. This is accounted for by the cost of hiring a fieldman by the Association.

In 1940, the expense of wages and salaries was only 23 percent of the total expenses as compared to 51 percent for the other two years (table 23).

Table 23. Expenses as percent of total expenses of the Association, 1939-1941

Expenses	Cents			Average 3 years
	1939	1940	1941	
Wages and salaries	51.7	23.5	51.2	36.47
Hauling	27.5	48.6	30.0	39.44
Office expense	4.7	.59	3.2	2.15
Telephone and telegraph	.98	1.7	3.3	1.91
Rent	1.7	.72	1.6	1.15
Storage	5.5	.17	0.0	1.27
Cooler	0.0	23.7	0.0	12.7
Miscellaneous	7.8	.96	10.6	4.80
Total	100	100	100	100

The small percent of total expense can be explained by the great increase of the total expense for that year due to hauling and cooler charges. The expense of the cooler was all charged to marketing costs for one year. This amounted to a cost of \$0.0215 per case in 1940. This cost and the high hauling costs account for the total expense of \$0.0907 in 1940 compared to \$0.046 in 1939 and \$0.059 in 1941.

This method of comparison is not entirely accurate because 1940 is not compared on the same basis as 1939 or 1941. According to good accounting principles, the cooler should not have been charged as a marketing expense for one year, but the cost should have been prorated over a period of years, depending upon its estimated life. In making a comparison between the three years the freight should not have been charged to marketing expense in 1940 inasmuch as the hauling expense was not charged to marketing expense in 1939 and 1941. In order to put all three years on a comparable basis, only the average freight charge per case in 1939 and 1941 is charged in 1940, and a depreciation expense of 10 percent of the cost of the cooler is charged in both 1940 and 1941. Thus, by putting all years on the same basis, the cost of marketing a case of raspberries would be \$0.046 in 1939, \$0.043 in 1940, and \$0.063 in 1941. The cost in 1941 would increase because depreciation charges of the cooler are added to the marketing expenses for 1941.

These costs indicate that the lowest marketing cost per case is during seasons of greatest volume of sales. The total labor costs of marketing the 1941 crop were about the same as the labor costs in 1940, even though the total deliveries of raspberries decreased 30 percent in 1941. The cost of salaries and labor accounts for the

increase in costs per case in 1941.

Transportation and Brokerage Expenses. Practically all shipments to Denver in 1939 were made by rail at an average transportation charge of \$0.22 per case (table 24).

Table 24. Per case analysis of sales to broker

Year	Number of cases sold	Ave. Trans. charge per case	Broker's age	Price received in Denver	Net Price Received
		Dollars	Dollars	Dollars	Dollars
1939	4,220	.22	.08	.99	.69
1940	3,672	.205	.05	1.135	.88
1941	2,898	.205	.05	1.405	1.20

Two full carloads were shipped, one containing 1,278 cases and the other 1,872 cases. The average transportation charge on these two cars was only \$0.145 compared with the average of about \$0.385 per case for express L.C.L. shipments. Thus, in 1939, full car transportation cost was \$0.24 a case cheaper than shipments by express. Shipments in 1940 were made by refrigerator truck at a cost of \$0.20 per case. Express shipments to Denver were reduced to \$0.205 a case in 1941.

The first full carload of raspberries that was sent to Denver arrived in fine shape and the net returns per case were \$0.905. Because of improper refrigeration or some other reason, the second car of 1,872 cases of berries was moldy upon arrival at Denver. These berries only netted the Association \$0.59 per case. The average net return for the two cars was \$0.72 per case compared to the total average

price of \$0.69 received as shown in table 24. Carload shipments of raspberries offer possibilities for the Association especially now that they have a pre-cooling unit.

The rate from Orem to Denver in refrigerated cars with a minimum of 24,000 pounds is \$0.67 per 100 pounds. ^{6/} Thus, 2,400 cases would be required for one shipment, but the transportation charges would only be \$0.08 per case compared to truck shipments of \$0.20 per case and express shipments of \$0.205 per case. This would increase the net returns approximately \$0.12. The problem is: can the broker in Denver handle and dispose of such a large shipment at one time.

Returns to Growers. The average price paid to growers increased from \$0.76 in 1939 to \$1.09 in 1941 (table 25). The reasons for this increase in price were: the Association improved their marketing operations which included the maintenance of a smoother flow of raspberries to the market by the establishment of surplus outlets; the Association developed grade standards which resulted in putting a better grade of raspberries on the market; and business conditions were improved.

Table 25. Average price paid to growers for raspberries by grade, 1939-1940-1941

	1939	1940	1941	Average 3 years
Grade:	Dollars	Dollars	Dollars	Dollars
Special	—	.85	1.20	1.02
No. 1	.80	.75	1.05	.87
No. 2	.65	.60	.95	.73
No. 3	.55	.50	.90	.65
Average all grades	.76	.75	1.09	.84

^{6/} Letter from E. E. Davies, Union Pacific Agricultural Inspection Agent

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Average returns per member increased more rapidly than average returns per acre (figure 10). The average returns per acre increased from \$141.90 in 1939 to \$314.71 in 1941 (table 26). The average returns per member increased from \$117.63 in 1939 to \$404.56 in 1941 (table 27).

Table 26. Returns per acre for members of the Association

Year	Acres	Net amount paid to growers	Average returns per acre
		Dollars	Dollars
1939	164.14	23,292.11	141.90
1940	135.04	26,891.22	198.60
1941	85.06	26,939.87	314.71
Average			
3 years	1.28	25,076.90	218.40

Table 27. Average returns per member of Association

Year	Members	Net amount paid to growers	Average returns Per member
		Dollars	Dollars
1939	198	23,292.11	117.63
1940	117	26,891.22	229.83
1941	62	25,076.90	404.56
Average			
3 years	125.6	25,086.74	250.67

The average returns per acre increased because of increased number of cases per acre and increase of price per case. Plowing up old low yielding varieties and planting new and superior raspberry plants was a contributing factor to this increased yield.

Payment on the basis of grade and quality resulted in the general

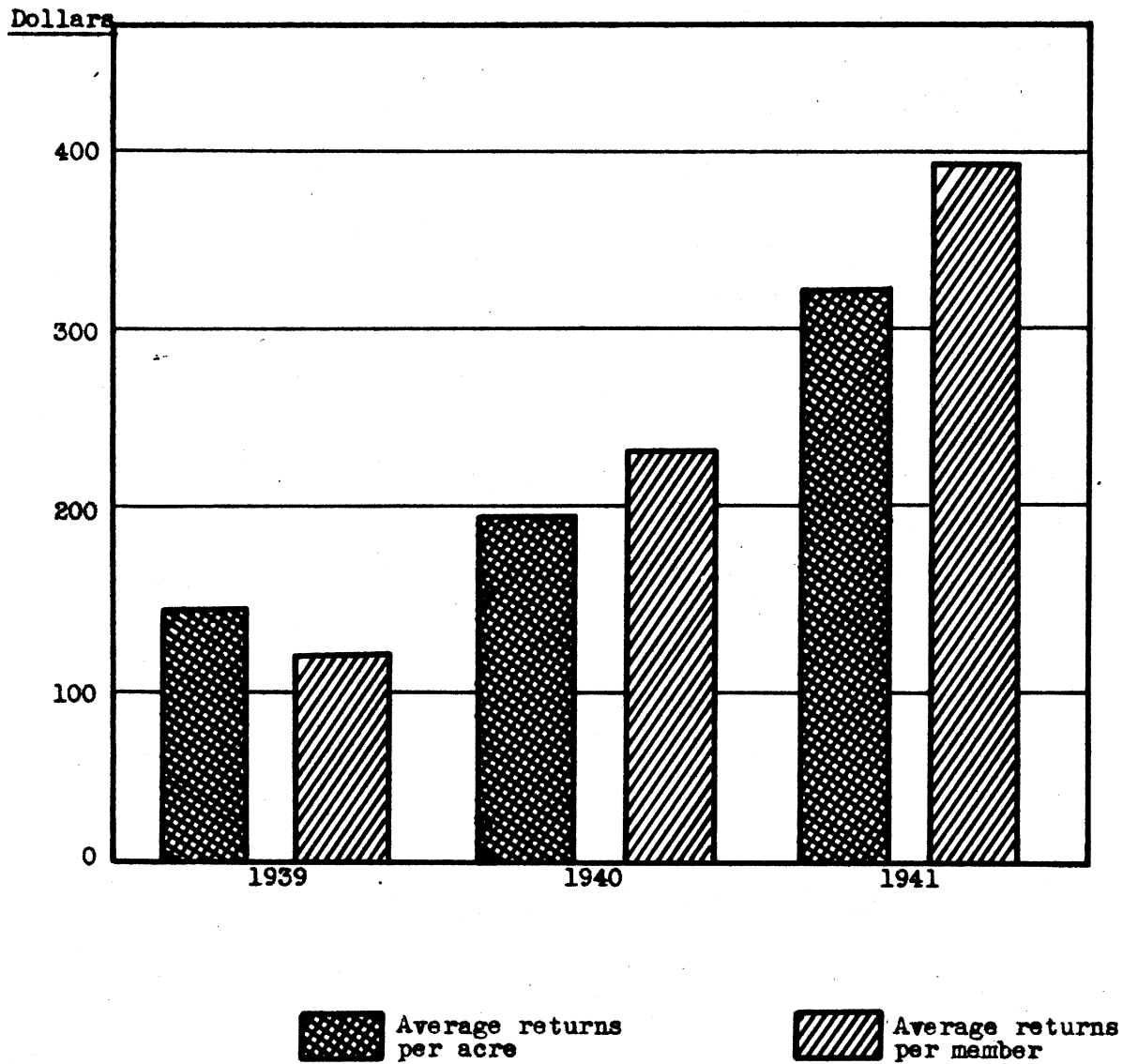


Figure 10. Average returns per acre and per member for raspberries delivered to Utah Berry Growers' Association, 1939-41

improvement of raspberries grown by the members of the Association. The increase in production of special and number 1 grade berries resulted in larger returns to producers for berries grown. The market problem of the Association decreases with the improvement of the grade and quality of raspberries produced by its members.

CONCLUSIONS

The Utah Berry Growers' Association was organized because there was a definite need for a marketing organization through which the growers in Utah county could sell their berries.

Payment for berries on the basis of grade and quality resulted in the production of better quality produce, higher returns to members, and a decrease in marketing problems.

As a result of the Association, considerable improvement has been made in the marketing of raspberries in Utah county since 1939.

Sales of raspberries to fresh markets did not increase in proportion to the increase of better grade berries. This indicates that more attention might be given to the development of the markets in Colorado, Wyoming, Idaho, and Nevada rather than disposing of such large quantities of raspberries at low prices through the canning companies and the Frosted Fruit Company in California.

Because of the improvement of the local market by the Association disposing of the surplus in other areas, members, as well as non-members, of the Association have benefited.

The most serious problem confronting the Association at the present time is lack of interest and a decreasing membership. Greater interest in the Association could be created through educational work among the growers in the county.

SUMMARY

Unsatisfactory conditions for the marketing of raspberries in Utah were intensified in 1938 due to large yields, inadequate outlets, and very low prices.

The Utah Berry Growers' Association was organized in Utah County in 1939 to serve the raspberry growers from Mapleton to Pleasant Grove.

Total deliveries of raspberries to the Association in 1939 were 30,033 cases, in 1940, 36,548 cases, and in 1941, 25,551 cases. Deliveries of raspberries to the Association were greatest on Monday and lowest on Saturday and Sunday.

The Safeway Stores constituted the largest single market. During the three-year period, 20,722 cases of raspberries were sold to this agency.

During the three-year period, 23 percent of the raspberries was sold to retailers, 23 percent to "others", 23 percent to canneries, 10 percent to the broker, 7 percent to the wholesaler, and 4 percent to the Frosted Fruit Company.

During the three years an average of 69 percent was sold in Utah, 13 percent in Colorado, 13 percent in Wyoming, 4 percent in California, and less than 1 percent in each of the states of Nebraska, Idaho, and Nevada.

The highest average price of \$0.98 a case was received from sales to the fresh markets in Utah. Sales in Colorado averaged \$0.93, and sales in Wyoming averaged \$0.97. The highest average price was received from sales in Wyoming in 1939, Colorado in 1940, and Utah in 1941.

Over the three-year period the wholesaler paid an average price of

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\$1.00 a case, retailers \$0.97, "others" \$0.933, the broker \$0.923, Salt Lake Public Market \$0.886, canning company \$0.616, and the Frosted Fruit Company paid an average of \$0.92 per case in 1941.

The comparable cost of marketing a case of raspberries was \$0.046 in 1939, \$0.043 in 1940, and \$0.063 in 1941.

Average return to growers for raspberries was \$0.76 a case in 1939, \$0.75 in 1940, and \$1.09 in 1941.

The Association was instrumental in improving the grade and quality of raspberries grown in Utah county, in the development of better market outlets, in the development of orderly marketing, and in increasing the net returns for raspberries grown for non-members as well as members.

These are the factors that made possible the success of the Association. The future success of this organization depends on its ability to create interest among its members, the prices it will be able to pay to the growers, and its ability to solve the marketing problems confronting the raspberry growers in Utah county.