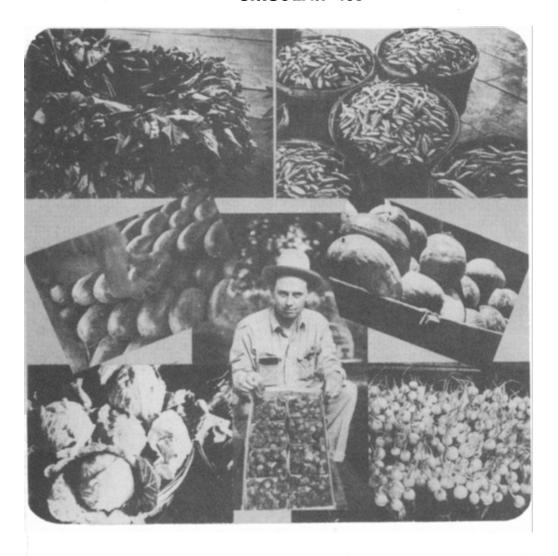
# Marketing Fruits and College Vegetables in Oklahoma

CIRCULAR 463



# EXTENSION SERVICE

SHAWNEE BROWN, DIRECTOR

OKLAHOMA A. & MICULTURAL COLLEGE
SHAWNEE BROWN, DIRECTOR

STILL WATER CONCINCAL COLLEGE

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# Introduction

It is the purpose of this bulletin to review briefly the importance of the fruit and vegetable industry in Oklahoma, areas of production, factors entering into the marketing of the crop, and business organizations marketing Oklahoma fruits and vegetables.

Reference is made to sources where information on buyers may be obtained. Important market news and outlook reports are also cited. It is recognized that this subject is being treated in its broadest terms. More detailed information can be obtained from the county agent or Marketing Specialists, Stillwater, Oklahoma.



#### MARKETING FRUITS AND VEGETABLES IN OKLAHOMA

#### **Importance**

The total acreage of commercial truck crops including potatoes and sweet potatoes in 1945 was 46,230. Land in fruit orchards, vineyards, and planted nut trees amounted to 51,888 acres. Fruits, vegetables, and nuts marketed in 1945 were valued at  $14\frac{1}{2}$  million dollars. While this amount represents only about three per cent of the farmers' total cash income from agricultural products in 1945, because of the high per acre value of fruits, vegetables, and nuts, these crops are very important in the areas where they are grown as well as the entire economy of the state. The importance of income from fruits, vegetables, and nuts as compared with other major agricultural commodities is illustrated in Table I.

Table I.

TOTAL CASH INCOME FROM THE SALE OF FARM PRODUCTS IN OKLAHOMA, 1940-1945

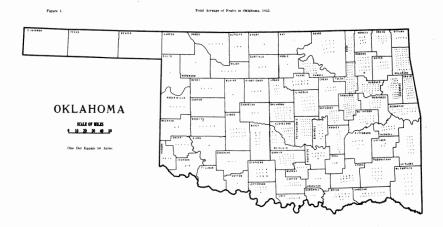
Commodities	1940	1941	1942	1943	1944	1945
	1000 Dollars	1000 Dollars	1000 Dollars	1000 Dollars	1000 Dollars	1000 Dollars
Fruits, Nuts & Vege-		0.040	0.004	19.00	10 507	14 616
tables	4,809	6,343	8,204	13,887	12,597	14,616
Cotton & Cottonseed	,	58,580	66,435	44,569	62,319	37,116
Grain	37,708	46,673	65,391	44,159	101,311	$91,\!665$
Other Crops	7,296	8,748	15,955	19,220	$25,\!566$	27,778
All Crops	90,007	120,344	155,985	121,835	201,793	171,175
Meat Animals	59,037	78,481	122,221	157,012	133,829	151,232
Dairy Products	23,076	30,119	38,543	49,075	51,852	53,082
Poultry & Eggs	14,163	22,037	35,234	52,740	49,230	52,306
Other Livestock & Products	2,664	2,246	2,309	3,067	1,963	2,651
All Livestock & Products	98,940	132,883	198,307	261,894	236,874	259,271
Total Crops & Livestock	188,947	253,227	354,292	383,729	438,667	430,446

Source: Cash Receipts from Farm Marketings, 1924-1944; Farm Income Situation, April, 1946, Pages 14, 15, 16 and 17.

<sup>&</sup>lt;sup>1</sup> Source: Agricultural Statistics, 1946, United States Department of Agriculture, Pages 217, 250 and 257.

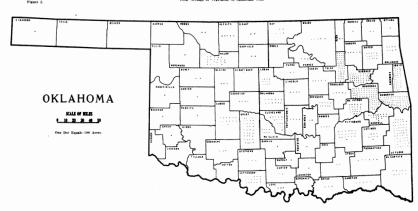
<sup>&</sup>lt;sup>2</sup> Source: United States Census, 1945, (1944 crop year).

**Production Areas.** Commercial production of fruits and vegetables in Oklahoma is largely restricted to the eastern one-half of the state. The areas of production of fruits, vegetables, and nuts are graphically illustrated in Figures 1 and 2.



Even in the eastern one-half of the state vegetable production is mostly confined to an area known as the Arkansas River Valley. The soil in this valley is fertile, friable, and a deep, fine, sandy loam of good structure. It is classified as Loneke, Canadian Loneke, Canadian, and Yahola. Considerable vegetables are grown along the Red River Valley in Southern Oklahoma, and the Canadian River Valley in East Central Oklahoma is also an important vegetable producing area.

The production map is changing somewhat as the years progress by reason of the introduction of new varieties, the appearance of diseases and insects, and the development of new uses and outlets. Irrigation projects now being developed may open up new areas of production in the near future.



Volume of Fruits and Vegetables Shipped. In 1945 the total carlot shipments of fruits and vegetables from Oklahoma stations were 1,191 cars (Table II). These figures do not include truck shipments or less than carlot shipments. Statistics on truck shipments are not available; however, it is known that truck movements are increasing in importance each year. Watermelons are the most important vegetables shipped, making up about two-thirds of the total shipments. The bulk of the shipments are made in the month of August (Table III).

## Factors in Marketing

Many factors enter into the production and marketing of fruits and vegetables. For example, potato growers in California average 324 bushels per acre for the period 1934-1945 as compared with 63 bushels per acre in Oklahoma. Hence, with the advantage in yield and improved marketing methods such as washing, California potatoes have been supplying markets formerly served by Oklahoma potato growers. As a result, (other reasons also entering in) potato production in Oklahoma has shown a steady decline for the past ten years.

Some areas within the state are better situated from climatic and soil conditions to produce better quality products by reason of these advantages. For example, the west central part of the state excels in the production of watermelons while most of the spinach produced in the state comes from the Arkansas River Valley of the east central part of the state.



Auction market shed of Cherokee Fruit Growers Association, Tahlequah, Oklahoma.

Table II.

CAR-LOT SHIPMENTS OF FRUITS AND VEGETABLES IN OKLAHOMA BY YEARS (1934-45)

Commodity	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
Apples				7		. 1			13	10	7	4
Beans, (Snap & Lin	ıa)	3	1	7	12	2	5	14	5	31	29	4
Beets		1		1						1		
Cabbage		12		3			********	3	<b>2</b>	4	5	4
Cantaloups			6	18	4	9					3	12
Carrots		3										
Corn, (Green)	13	1		7	4	4		5	25	71	144	117
Cucumbers							7				9	
Grapes		1										
Greens										5	8	
Honey Dew Melons.												1
Mixed Vegetables	5	14	2	11		6	1	<b>2</b>	2	12	10	16
Onions	64	74	3	14	32	49	85	28	128	38	181	28
Peaches	30	8		22	2		9	9	2			
Peas							1					
Potatoes	1,878	844	<b>91</b> 8	912	726	616	619	439	419	771	239	8
Spinach	94	62	47	59	12	25	42	21	40	106	143	70
Strawberries	54											
Sweet Potatoes		43	33	8	8	14	8	37	<b>5</b> 8	15	25	12
Tomatoes	6	1		1	11	14	19	20	14	10	25	57
Turnips ,			1	3			/		5	1		
Watermalana	6	10	22	139	79	155	282	165	378	<b>34</b> 3	1,773	858
GRAND TOTA	L 2,192	1,077	1,033	1,212	890	895	1,078	<b>74</b> 3	1,091	1,418	2,601	1,191

Source: Car-Lot Shipments of Fruits and Vegetables, 1934 to 1945, Inclusive, United States Department of Agriculture, Bureau of Agricultural Economics, Production and Marketing Administration.

<sup>&</sup>lt;sup>1</sup> Includes car-lot shipments to points within and outside the State, however, practically all car-lot shipments are to points outside the State.

Quite often producers are encouraged by promoters to plant vegetables in new areas. Many have had the unhappy experience of producing a large supply of vegetables only to find that there were no market facilities or outlets available. Because fruits and vegetables are highly perishable, it is most important that ready markets be available to provide for their easy movement into consumption channels. A few days' delay without a market outlet may mean total loss of the crop. Generally speaking, commercial fruit and vegetable production and marketing is a highly specialized field.

Excess or shortage in supply usually causes wide fluctuation in the prices received by growers. While progress is being made in the cold storage and frozen food industry, these outlets can at best handle only a small part of the crop.

Generally, it is better to produce toward serving the local market first as usually this is the most important one. Markets that have a broad, steady demand are usually the best markets if it becomes necessary to make distant shipments. "Cash track" '\* sales are desirable.

It is important that responsible commission merchants be selected if consignment shipments are made. It is also necessary that the buyers' financial responsibility and reliability be determined.

Quality is important in all agriculture products. Fruits and vegetables are no exception. High quality fruits and vegetables usually have a ready market, whereas poor quality products may not sell at any price.

It is important that fruits and vegetables be packed in suitable containers. Insofar as possible, use of standard containers is desired.

<sup>\*</sup>The term "cash track" means that the sale was made at shipping point and that the title and all responsibility for the commodity passed to the buyer at that time and at that point.

<sup>\*</sup> Source: Selling Fresh Fruits and Vegetables Cooperatively, Bulletin 49, J. H. Heckman, Farm Credit Administration, United States Department of Agriculture, June 1941.



Farm market shed, Norman, Oklahoma, erected by Chamber of Commerce, Extension Division, cooperating.

#### Table III.

# CAR-LOT SHIPMENTS OF FRUITS AND VEGETABLES IN OKLAHOMA DURING 1945

#### Commodity

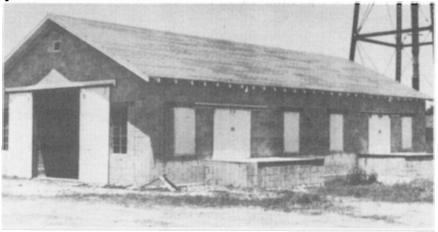
Apples       3       1       4         Beans, (Snap & Lima)       4       3       4         Cabbage       4       4       4         Cantaloups       4       12         Corn, Green       9       108       117         Honey Dew Melons       1       1       1         Mixed Vegetables       6       4       1       1       4         Onions       26       2       28         Potatoes, Irish       8       8       8         Spinach       10       27       6       15       12       70         Potatoes, Sweet       6       2       2       2       2       12         Tomatoes       16       33       8       57         Watermelons       33       653       171       1       858         GRAND TOTAL 6       2       12       33       6       41       208       675       173       2       19       14       1191														
Lima)       4       8       12       12       12       12       17       14       16       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       17       18       18       18       18       18       18       18       18       18       18       18       18       18       18       18       18       19 </td <td>Apples</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3</td> <td>1</td> <td></td> <td></td> <td></td> <td>4</td>	Apples								3	1				4
Cabbage       4       4       8       12         Corn, Green       9 108       117         Honey Dew Melons       1       1       1         Mixed Vegetables       6       4       1       1       4       16         Onions       26       2       28         Potatoes, Irish       8       8       8       8         Spinach       10       27       6       15       12       70         Potatoes, Sweet       6       2       2       2       2       12         Tomatoes       16       33       8       57         Watermelons       33       653       171       1       858														
Cantaloups       4       8       12         Corn, Green       9       108       117         Honey Dew Melons       1       1       1         Mixed Vegetables       6       4       1       1       4       16         Onions       26       2       28         Potatoes, Irish       8       8       8       8         Spinach       10       27       6       15       12       70         Potatoes, Sweet       6       2       2       2       12         Tomatoes       16       33       8       57         Watermelons       33       653       171       1       858	Lima)						4							4
Corn, Green       9 108       117         Honey Dew Melons       1 1       1         Mixed Vegetables       6 4 1 1 4 14       16         Onions       26 2 28       28         Potatoes, Irish       8 5 10 27 6 15 12 70         Potatoes, Sweet       6 2 2 12 12       2 12         Tomatoes       16 33 8 57       57         Watermelons       33 653 171 1 858	Cabbage						4							4
Corn, Green       9 108       117         Honey Dew Melons       1 1 1 4 16         Mixed Vegetables       6 4 1 1 4 16         Onions       26 2 28         Potatoes, Irish       8 - 8 5         Spinach       10 27 6 - 15 12 70         Potatoes, Sweet       6 2 2 - 2 12         Tomatoes       16 33 8 5         Watermelons       33 653 171 1 858	Cantaloups							4	8					12
Mixed Vegetables       6       4       1       4       16         Onions       26       2       28         Potatoes, Irish       8       8       8         Spinach       10       27       6       15       12       70         Potatoes, Sweet       6       2       2       2       12       2       12         Tomatoes       16       33       8       57       57         Watermelons       33       653       171       1       858							9	108						117
Onions	Honey Dew Melons									1				1
Onions	Mixed Vegetables				6			4	1		1	4		16
Spinach       10       27       6       15       12       70         Potatoes, Sweet       6       2       2       2       2       12       12       70         Tomatoes       16       33       8       57       57         Watermelons       33       653       171       1       858								26	2					28
Spinach       10       27       6       15       12       70         Potatoes, Sweet       6       2       2       2       2       12       12       70         Tomatoes       16       33       8       57       57         Watermelons       33       653       171       1       858	Potatoes, Irish						8							8
Potatoes, Sweet 6 2 2 2 12 Tomatoes 2 16 33 8 57 Watermelons 33 653 171 1 858												15	12	_
Tomatoes													2	12
Watermelons							16	33	8				_	
									_	171	1			
GRAND TOTAL 6 2 12 33 6 41 208 675 173 2 19 14 1191								30	000		-			200
	GRAND TOTAL	6	2	12	33	6	41	208	675	<b>17</b> 3	2	19	14	1191

Source: Car-Lot Shipments of Fruits and Vegetables, 1945, U.S.D.A., Bureau of Agricultural Economics and Production and Marketing Administration.

¹ Includes car-lot shipments to points within and outside the State, however, practically all car-lot shipments are to points outside the State.

# **Business Organizations Marketing Oklahoma Fruits & Vegetables**

Although the total production of fruits and vegetables in Oklahoma is relatively small, there are many different methods and agencies used by farmers in disposing of their products. Many of these agencies handle a small volume, and for this reason it is difficult for them to keep in contact with the best market outlets and adopt efficient marketing methods. Available facilities and present methods being used locally may determine the best method of marketing. Local facilities and methods may be inadequate thereby requiring the development of marketing facilities and methods best suited to the needs of the individual grower or community. Marketing fruits and vegetables requires sound business methods the same as any other enterprise.

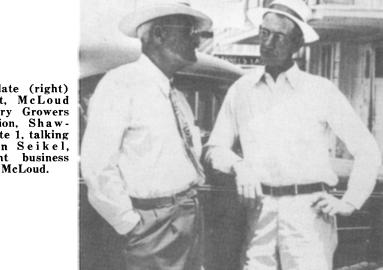


New marketing shed, McLoud Blackberry Growers Association, McLoud, Oklahoma.



Bixby Truck Growers Association loading dock, Bixby, Oklahoma.

Local Buyers. A considerable volume of fruits and vegetables in Oklahoma is handled by local buyers. Many buy and sell on their own account. Some act as brokers or agents for larger distributing companies. Most of the local buyers handle fruits and vegetables as a supplemental operation to their principal business. Only a few have facilities for grading, sorting, washing, packaging, and transporting.



B. J. Slate (right) President, McLoud Blackberry Growers Association, Shawnee, Route 1, talking to John Seikel, prominent business man of McLoud.

Farmers Cooperatives. Fruits and vegetable cooperatives vary in size, services performed, and facilities owned. Most of them act merely as assembling points and some have limited facilities for grading, sorting, and packing. One of the largest cooperatives handling fruits and vegetables is located at Bixby, Business men, through their organizations, have cooperated with farmers at several points in the state by providing marketing sheds. Here, farmers bring their produce, usually pay a nominal fee for use of a stall, and sell their produce direct to the public.

An auction market is located at Tahleguah, Oklahoma, where farmers bring their produce (strawberries are the principal crop) to be auctioned to the highest bidder.

Watermelon marketing cooperatives handle a considerable volume of the watermelons produced in the state. Some of the local marketing associations have affiliated themselves with a federated sales agency, whose purpose is to sell the watermelons for the local associations. (See diagram)

Itinerant Truckers. A large portion of fruits and vegetables are distributed by trucks. A majority of these trucks are owned by individuals who make a business of buying direct from the grower and trucking it to other parts of the state or other states and selling to retail stores or direct to consumers.



Loading watermelons sold by the Cimarron Valley Melon Growers Federation, Fairview, Oklahoma.

Canneries. The major vegetables processed in Oklahoma are spinach and beans. Only a limited amount of fruit is canned. There has been a rapid expansion of the canning industry in Oklahoma. This has been due partly to war demands both from civilians and for military uses. Latest available reports show twenty canneries in the state. A few pickle processing plants are in operation.



Cannery located at Stigler, Oklahoma.

#### OBJECTIVES OF LOCAL AND FEDERATED

#### FRUIT AND VEGETABLE COOPERATIVES

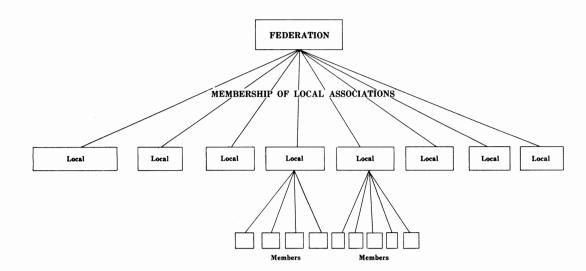
#### Program of Federation:

- Keep informed on prices, etc.
   Pass market prices to locals.
   Sell car-lot shipments of locals.
- Return to locals proceeds minus deduction for selling.
- 5. Advertise products.
- 6. Uniform membership and representation of locals.
- 7. All expenses prorated—on volume basis.

#### Program of Locals:

- 1. Production and quality problems.
- Survey on loading dates and volume for Federation.
   Secure cars and packing.
   Load cars properly.

- 5. Government inspection.
- 6. Membership problems.
- Membership problems.
   Pay growers after taking out for all local expenses and operation.
   Work closely with Federation to keep produce sold to the best advantage to growers.
   Sell produce to truckers at prices which are in line with car-lot shipping prices.



13

Frozen Fruit and Vegetable Industry. The frozen fruit and vegetable industry is still in an early developing stage. Increased amounts of peaches and berry crops are going into home and commercial freezers. The present indications are that the frozen fruit and vegetable industry will provide growers with new market outlets which will be to their economic advantage.

# Market Outlets

Local buyers, cooperative marketing associations, itinerant truckers and individual growers need to keep in contact with sources in a position to advise them about prospective buyers and market outlets. The following is a source of this information.

- (a) Agricultural representative railroads serving areas.
- (b) Chain stores agricultural representatives.
- (c) United Fresh Fruit and Vegetable Association 1425 South Racine Avenue, Chicago, Illinois.
- (d) Agriculture Section, Chamber of Commerce in terminal markets.
- (e) National Association of Food Chains 726 Jackson Place, N. W., Washington, D. C.
- (f) Fruit and Vegetable Branch, Production and Marketing Administration, Washington, D. C.
- (g) County Agriculture Agents.
- (h) Extension Division, Stillwater, Oklahoma.



Watermelons loaded in car.

# Market News and Outlook Reports

Through a nationwide system of field offices and leased wire facilities, the Production and Marketing Administration gathers market news on supply, demand, movement, quality, and prices of fruits and vegetables. This information reaches the public and interested producing districts throughout the country by wire, radio, newspaper, and mail. Daily, weekly, semi-monthly, and other periodic reports are compiled in leading wholesale markets and in many important production areas of the United States.



Two 4-H Club girls operate a small roadside market stand.

Market news reports may be obtained upon request.

Timely outlook and market information may be obtained from the following publications: Current Farm Economics, prepared bi-monthly by the Oklahoma Department of Agriculture Economics and Extension Economists, Oklahoma A. and M. College, Stillwater, Oklahoma; Farm Business Facts, prepared bimonthly by Extension Economists, Stillwater, Oklahoma; The Vegetable Situation, issued quarterly by the Bureau of Agriculture Economics, United States Department of Agriculture, Washington, D. C.; and The Fruit Situation, issued quarterly by the Bureau of Agriculture Economics, United States Department of Agriculture, Washington, D. C.

Production and Marketing Administration,

Chicago 8, Illinois, 305 Produce Traders' Building, 1421 S. Aberdene Street;

Kansas City 6, Missouri, 317 U. S. Court House Building, 8th and Grand Street;

Oklahoma City 5, Oklahoma, 122 Capitol Building.



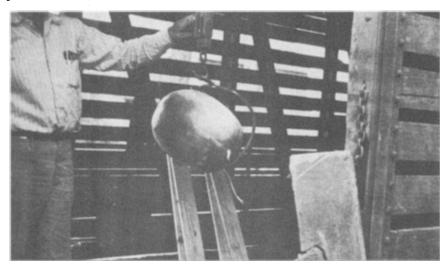
Sweet corn ready to be loaded for shipment, Bixby, Oklahoma.

<sup>&#</sup>x27;For fruit and vegetable reports most important to Oklahoma growers and shippers, request reports from:

## Inspection

Oklahoma is cooperating with the United States Department of Agriculture in rendering an inspection service at shipping points. Inspections are made in carlot and less than carlot quantities. The State Department of Agriculture, State Capitol Building, Oklahoma City, Oklahoma provides trained personnel to carry on inspection and regulatory work.

While this service is not compulsory, it makes possible standardization of grades, thereby permitting growers and shippers to deal with distant buyers on basis of U. S. grades.



Inspecting and grading watermelons for shipment.



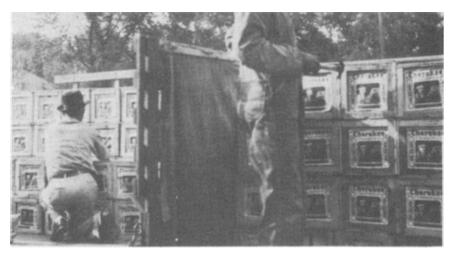
Sorting and grading apples in Eastern Oklahoma.



Preparing sweet corn for shipment, Bixby, Oklahoma.



Harvesting blackberries in Eastern Oklahoma.

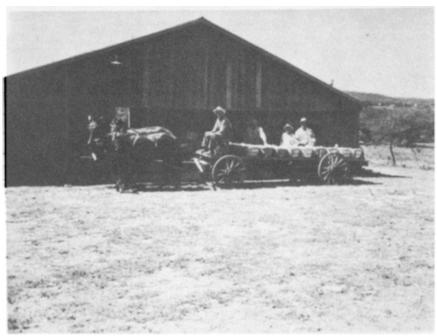


Loading strawberries sold at auction by Cherokee Fruit Growers Association, Tahlequah, Oklahoma.





Farm Womens Market, Stillwater, Oklahoma.



Unloading peaches at grading shed in Eastern Oklahoma.

#### **SUMMARY**

Fruits and vegetables represent only a small percentage of the total cash income of Oklahoma farmers, however, there are areas of production in the state that are very important.

Most fruits and vegetables are produced in the eastern one-half of the state.

Many factors enter in the production and marketing of fruits and vegetables such as (a) competing areas of production, (b) fruits and vegetables being highly perishable require market outlets providing quick movement into consumption channels, (c) excess or shortages in supply cause wide fluctuation in prices, (d) local markets versus distant markets, (e) selecting the marketing agency, (f) quality, and (g) packaging or packing.

A number of business organizations handle fruits and vegetables in Oklahoma. The more important ones are namely: (a) local buyers, (b) farmers cooperatives, (c) itinerant truckers, (d) canneries, and (e) frozen fruits and vegetables industry.

It is important to fruit and vegetable growers and dealers that they be informed on market outlets, market news, and outlet reports.

Inspection service is available which makes possible standardization of grades.



(See Next Page for Other Publications Available)

## OTHER PUBLICATIONS AVAILABLE

In addition to this bulletin the following publications may be of interest to fruit and vegetable growers and dealers.

- Commercial Trucking of Fruits and Vegetables in Nine Atlantic Coast States, Bulletin No. 17, Nephtune Fogelberg and Herbert W. Mumford, Jr.
- Use of Motortrucks in Marketing Fruits and Vegetables, Bulletin No. 18, Marius P. Rasmussen
- Operation of Small-Lot Country Fruit and Vegetable Auctions, Circular No. C-118, Edwin W. Cake
- Keeping Pace in Marketing Fresh Fruits and Vegetables, Leaflet No. L-11
- Selling Fresh Fruits and Vegetables Cooperatively, Bulletin 49, J. H. Heckman
- Handbook of United States Standards for Grading and Marketing Fresh Fruits and Vegetables, Miscellaneous Publication No. 190, Bureau of Agricultural Economics
- Standardization and Inspection of Fresh Fruits and Vegetables, Miscellaneous Publication No. 604, Raymond L. Spangler, Marketing Specialist, United States Department of Agriculture
- Containers for Fruits and Vegetables, Farmers' Bulletin No. 1821, L. C. Carey, Marketing Specialist, B. A. E.
- Marketing Fruits and Vegetables Cooperatively, Circular No. C-110, M. C. Gay
- Using Your Fruit and Vegetable Co-op., Circular E-12, A. W. McKay
- Roadside Marketing, Marketing Extension Service Circular, A. W. Jacob, Extension Economist

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Cooperative Extension Work in Agriculture and Home Economics, Extension Service, Oklahoma A. & M. College, and U. S. Department of Agriculture Cooperating, Acts of Congress of May 8 and June 30, 1914.