MARKETING DOMESTIC Dates

PACKINGHOUSE PRACTICES AND COSTS

U.S. Department of Agriculture Agricultural Marketing Service Marketing Research Division
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PREFACE

In recent years, growers and packers of California dates have found the prices received for dates decreasing. This has spurred attempts to find ways to improve these prices and to reduce the costs of growing and packing dates.

The study reported on here involves a general survey of costs and marketing practices in date packinghouses to probe ways in which the net returns for dates might be improved. It is one phase of a larger study aimed at improving the efficiency of date marketing. Another report is planned to provide information on the relative costs and efficiencies of various methods and types of equipment used in date packinghouses.

The cooperation of packers who furnished information about their operations and practices is gratefully acknowledged. Thanks are due Billy J. Peightal and Merton DeWitt, of the Date Administrative Committee, who obtained the cooperation of plant personnel. Frank M. Ross of the Midwest Research Institute collected the survey schedules under contract with the Department.

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HIGHLIGHTS

Marketing problems of the date industry have grown more important in recent years as production increased sharply and prices fell. This report presents information on marketing practices and on packing plant organization and costs as a basis for consideration of possible adjustments by members of the industry.

The 18 plants supplying information for this study handled 90 percent of the California date crop, with volume per plant varying from less than 10,000 pounds to several million pounds per year. The three largest plants handled approximately 70 percent of the total crop.

Packers purchased 44 percent of their dates from growers, and the remainder was received from grower-members of cooperatives or from the packer's own trees. Almost all of the dates handled by the medium- and small-sized plants were from their own date gardens. Nearly all of the dates were bought on a graded basis.

The three largest packinghouses pack the majority of the retail size packages and all of the pitted dates.

Costs of packing are affected by the proportion of the plant's output packed in retail-size packages. On the basis of total date receipts in plants, the cost averages about 4 cents per pound for bulk packaging and about 9 cents per pound when 90 percent of the output is packaged in retail sizes. Five plants cut overhead costs per unit by packing other products, mainly in the off season.

Chainstores were the biggest single outlet for dates, taking 50 percent of the 1956-57 sales. Produce wholesalers and specialty wholesalers took 25 percent, and general-line grocery wholesalers, independent retailers, bakers, candy-makers, mail order buyers, and retail date shops took the remainder. Slightly over one-half of the sales were made through brokers. Direct sales to chainstores by the large packers have increased somewhat in recent years. Packers have found it necessary to maintain larger stocks in the market areas than previously.

Almost all of the advertising and promotion expenditures in the industry were made by the three large packers. During the 1956-57 season, they spent about 3 percent of their sales returns for point-of-sale material, dealer service work, and advertising. Tests of the effectiveness of advertising and promotion for dates in selected markets are needed to indicate the possibilities of increasing sales through this approach.

MARKETING DOMESTIC DATES
Packinghouse Practices and Costs

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INTRODUCTION

Date consumption in the United States averaged approximately 70 million pounds a year in 1954-56, or slightly less than one-half pound per capita. Imports, chiefly from Iraq, provided approximately 60 percent of this amount.

The date palm requires a very hot, dry climate which limits the commercial production of dates in the United States principally to certain desert valleys of southern California. The relatively young domestic date industry increased the production of dates rather steadily from 1 million pounds in 1926 to an average of over 40 million pounds in 1955-58. 1/

Substantial increases both in acreage and in yield per acre accounted for the increase in production over the years. Acreage increased from 600 acres in 1926 to 4,800 acres in 1957. A downward trend in new date plantings in recent years, however, indicates that total acreage has leveled off. There was a decrease of over 500 acres in bearing acreage between 1957 and 1959. Increases in total production in the near future will come from increased yield per acre rather than increased acreage. Yield has increased from less than 2,000 pounds per acre in 1926 to an average of 9,000 pounds per acre in 1954-58. Because of changes in weather from year to year, the average yield per acre and total production vary considerably.

The average price received by date growers increased from a low of 2 cents per pound in 1932 to 6 cents per pound in the late 1930's. The price then rose to a high of 24.6 cents per pound in 1944, but since 1945 the price has remained below 10 cents per pound and since 1950 below 7 cents per pound. In 1954-58 growers' prices averaged 5.3 cents per pound (table 10).

Favorable returns for dates during the early growth of the industry and later during the war years when imports of dates were cut off were largely responsible for new domestic date plantings. However, since date palms come into bearing 6 to 8 years after planting, those planted in the late 1940's and early 1950's are responsible for most of the increased production and lower prices of the late 1950's.

1/ Culls, shrinkage, and diversion to lower uses accounted for over 10 million pounds per year in 1955-57.

Industry-wide costs of growing dates are not available. But the University of California Extension Service obtained costs per acre from nine growers for the 1955-56 season and seven growers for the 1951-52 season. (4, 6) 2/ Since these selected growers had yields per acre somewhat higher than the average, their cost of production per pound would tend to be lower than average. The average quantity received at the packinghouse from these growers was 13,000 pounds per acre in 1951-52 and 14,360 in 1955-56. The average production cost per pound of dates received at the packinghouse, excluding management cost, was 6.63 cents per pound in 1951-52 and 5.33 cents per pound in 1955-56. This suggests that in recent years many growers' full costs of production have frequently averaged higher than the prices they received for dates.

METHODS OF IMPROVING RETURNS FROM DATES

The domestic date industry might improve its position by two principal avenues. It could (1) seek restrictions on imports of dates, or (2) improve the efficiency of growing, packing, and marketing domestic dates.

By the first means, returns for dates might be temporarily increased by higher tariffs or other restrictions on date imports. This could be accomplished under Section 22 of the Agricultural Adjustment Act if the United States Tariff Commission determined that dates were to be imported into the United States in such quantities as to interfere with the Federal date marketing order program and the U. S. Department of Agriculture's program for the diversion of dates to new uses. The Tariff Commission held hearings, one on November 1 and 2, 1956, in regard to the 1956-57 crop, and another on September 10 and 11, 1957, in regard to the 1957-58 crop. In both hearings the majority decisions of the United States Tariff Commission maintained that the imports of dates were not interfering with the marketing order and diversion programs for dates (11, 12). Therefore, it appears that not much more will be done to restrict the importation of dates. At the time of the study, the duty on pitted dates in package sizes over 10 pounds each, which comprise the major share of imports, was 2 cents per pound.

The way in which the domestic date industry can attempt to improve its position under item (2), above, is broad and includes: (a) the operation of a Federal date marketing agreement and order and the diversion program, (b) advertising and promotion, and (c) other means of improving the physical and economic efficiency of growing, packing, and marketing dates.

The Federal marketing order and diversion programs operate to improve the quality of dates marketed as whole dates and to allocate the different qualities of dates to different uses. Under the marketing order, which began with the 1955-56 crop, no whole dates may be sold the quality of which is not at least Grade C or better of the effective United States Standards for dates. All dates for further processing (product dates) must meet the same requirements except for moisture content. When necessary, the Secretary of Agriculture may establish further grade regulations upon advice from the industry Date Administrative Committee.

2/ Underscored numbers in parentheses refer to items in Bibliography, page 19.

The volume regulation of the date marketing order is employed only if the marketing outlook for a particular year suggests its use. The regulation limits the quantity sold in the domestic whole-date market and transfers the remaining dates to the product-date market or to exports. The Department encourages diversion to the product-date market by payments to the grower from Section 32 funds (Public Law 320, 74th Congress). This payment amounted to 4 cents per pound of whole dates diverted in 1956-57, 3 cents in 1957-58, and 2½ cents for the 1958-59 crop year.

The present study is concerned only indirectly with the Federal date marketing order and is part of a study dealing with the physical and economic efficiency of packing and marketing dates. Some of the procurement, handling, and selling--including advertising and promotion--practices among date packers are analyzed. The objective is to explore ways in which practices might be improved and net returns to growers increased. The general situation described in this report for the 1956-57 season has not changed markedly since that time.

SOURCE OF DATA

Information on date packing during the 1956-57 crop year was obtained from 18 of the 31 packinghouses in the Coachella Valley of California and vicinity. 3/ The survey included the five largest packers as well as a number of the medium- and smaller-sized packers, and covered 88 percent of the 1956-57 crop of dates received and packed. Information was obtained by questionnaires and discussions with packinghouse personnel and covered packinghouse procurement of dates, operation, costs, and selling practices. The packers included 12 single proprietorships, 3 corporations, 2 cooperatives, and 1 partnership.

SIZE OF PACKINGHOUSES

The volume of dates received by each packinghouse for the 1956-57 season ranged from less than 10,000 pounds to several million pounds. The packinghouses were classified into three groups--large, medium, and small. Large packinghouses received more than 4 million pounds per season, medium-sized packinghouses from 260,000 to 4 million pounds, and small packinghouses under 260,000 pounds (table 1).

The three large packinghouses handled 81 percent of the sample volume and 71 percent of the industry volume. The medium-sized packinghouses handled 16 percent of the sample volume and the small packinghouses 3 percent.

3/ All data in this report are on a crop-year basis unless otherwise stated. The 1956-57 crop year runs from August 1956 through July 1957.

Table 1.--Size and number of date packinghouses in the sample, and quantity of dates handled, 1956-57

Size of packinghouse by annual volume of dates handled	Packinghouses in sample	Volume handled	
	Number	1,000 pounds	Percent
Large, over 4,000,000 pounds	3	24,143	81
Medium, 260,000 to 4,000,000 pounds	8	4,837	16
Small, under 260,000 pounds	7	741	3
Total	18	29,721	100

Table 2.--Source of dates acquired by 18 packinghouses, 1956-57

Source	Quantity acquired	Percentage of total packed
	1,000 pounds	Percent
Packers' own production and cooperative growers	16,749	56
Private growers	12,972	44
Total	29,721	100

Table 3.--Quantity of dates acquired, by basis of payment to growers, 1956-57

Basis of payment	Quantity acquired	Percentage of total
	1,000 pounds	Percent
By grades or pooling 1/	28,647	96.4
Field run	788	2.7
Flat rate for marketable fruit	69	.2
Not specified	217	.7
Total	29,721	100.0

1/ Includes dates grown by the packer.

PACKINGHOUSE PRACTICES

Source of Dates

Cooperative grower-members and the packers themselves provided 56 percent of the total dates acquired by the packinghouses during the 1956-57 crop year. Packers purchased 44 percent from private growers (table 2).

Although the packers' own production was a relatively minor part of total production, it was an important source of dates for 11 packinghouses, which acquired over 90 percent of their supplies in this way. Many of these were small packinghouses operated by a single grower, although two were among the five largest packinghouses. Only two sample packinghouses did not grow at least some of the dates which they packed or processed.

The source of dates varied according to the volume handled in the packinghouses. Among the large packinghouses, the packers themselves and cooperative grower-members provided 53 percent of the dates handled. Cooperative growers provided the major share of this amount. Purchases from other growers provided the remaining 47 percent of the dates packed. The medium- and small-size packinghouse operators grew 72 percent of the dates they packed, and purchased the remainder from other growers.

Method of Payment to Grower

Most of the packinghouses paid growers according to the quality of dates delivered. This payment was based chiefly on grades, whether the dates were purchased outright, pooled, or grown by the packer. The method of payment and the quantities acquired are given in table 3.

Source and Cost of Labor

The 18 date packinghouses in the sample accounted for about 88 percent of California dates packed in 1956-57 and employed 1,155 workers during the peak season. Approximately 64 of these were year-round workers, while the remainder worked during all or a part of the packing season from October through February.

Variations in the type of labor employed by the different size packinghouses indicate a smaller proportion of year-round labor in the larger packinghouses. In addition, larger packinghouses used less family labor (table 4). In many of the small packinghouses, packing is done by family labor plus a few outside workers during the peak of the season.

Variations in wage rates for the same type of job among the different sizes of packinghouses were not significant. Wage rates for the peak-season labor, depending on the type of job, ranged from $1 to $1.25 per hour for women and $1 to $1.50 per hour for men.

Table 4.--Workers in date packinghouses, by size of plant, California, 1956-57

Kind of employment	Average per plant			
	All plants	3 large plants	8 medium plants	7 small plants
	Workers	Workers	Workers	Workers
Year-round	64	11.0	2.6	1.5
Seasonal	1,091	275.0	28.9	5.0
Family	34	.0	1.4	3.2
Other	1,121	286.0	30.1	3.3
Total during peak season	1,155	286.0	31.5	6.5

Types and Sizes of Packages

The types and sizes of date packages were only partly related to size of packinghouse. The large-size packinghouses mostly packed retail-size packages. Since this type of packaging requires investment in expensive equipment, as well as sales outlets for this type of package, the larger packinghouses can more easily package and sell the volume necessary to make this operation economical.

Operations vary considerably among the medium-size packinghouses. Some pack mainly consumer-size packages, some mainly bulk packages, and some a combination of both. The retail packages are sold largely to roadside stands and to mail-order buyers and bulk packages largely to buyers who later repackage into smaller package sizes.

The small-size packinghouses usually are grower operated and pack principally the grower's own dates. They pack mainly bulk packages for roadside stands and other buyers, but also pack some retail packages for roadside stands and mail-order business.

Packinghouses package both pitted and unpitted dates of various grades. The quantities packaged and average price per pound for the different sizes of packages are shown in table 5. Since only the three largest packers package pitted dates, the table represents complete industry coverage for pitted dates and about 60 percent coverage for unpitted dates.

For pitted dates a rather large proportion is packaged in 10-, 12-, and 16-ounce packages. Although some of the variations in prices between the different package sizes might be due to the quality of the dates and the time of the year when they are sold, the indications are that slightly higher prices per pound are received for dates in the smaller size packages.

Table 5.--Quantity and price of pitted and unpitted dates sold by three largest packinghouses, by size of package, 1956-57

Package size	Unpitted dates		Pitted dates	
	Sales	Weighted average price per pound	Sales	Weighted average price per pound
	1,000 pounds	Cents	1,000 pounds	Cents
7¼ ounces	---	---	57	30.6
8 ounces	1,515	21.8	4	30.7
10 ounces	---	---	1,032	28.6
12 ounces	4,441	19.2	421	28.1
16 ounces	3,674	19.5	489	26.8
2 to 5 pounds	909	21.7	66	28.7
12 pounds or over	2,070	16.3	304	1/ 31.4

1/ Includes a large proportion of hand-pitted dates.

The quantity of unpitted dates packaged in California is approximately nine times greater than of the pitted. The largest amount is packaged in 12-ounce packages, but 16-ounce, 8-ounce, and 2- to 5-pound packages are also important. Again there is a tendency for average prices per pound to be slightly higher for the smaller packages, but the prices received for the 2- to 5-pound packages compare favorably with the smaller ones because of the high price received for the 2-pound package. Discussions with plant personnel and the results of package-merchandising research conducted by the U. S. Department of Agriculture indicate the 2-pound package is popular with some of the date buyers and with many consumers. 4/

Medium- and small-size packinghouses receive a wide range of prices for their dates. Somewhat higher prices are paid for the moist natural dates which do not require hydration and somewhat lower prices for the hydrated dates. The general level of prices received, however, is lower for the bulk packages than for the smaller, retail-size packages.

Packinghouses which package for mail-order and for their own roadside shops or stands receive somewhat higher prices. This type of sale, however, requires extra costs of advertising and selling.

4/ Results of the research were reviewed in an address by George H. Goldsborough, Head, Merchandising Methods Section, Market Development Branch, U. S. Agr. Mktg. Serv., "Variety in Package Size Increases Date Sales," delivered before representatives of the Date Industry, Indio, Calif., January 17, 1958.

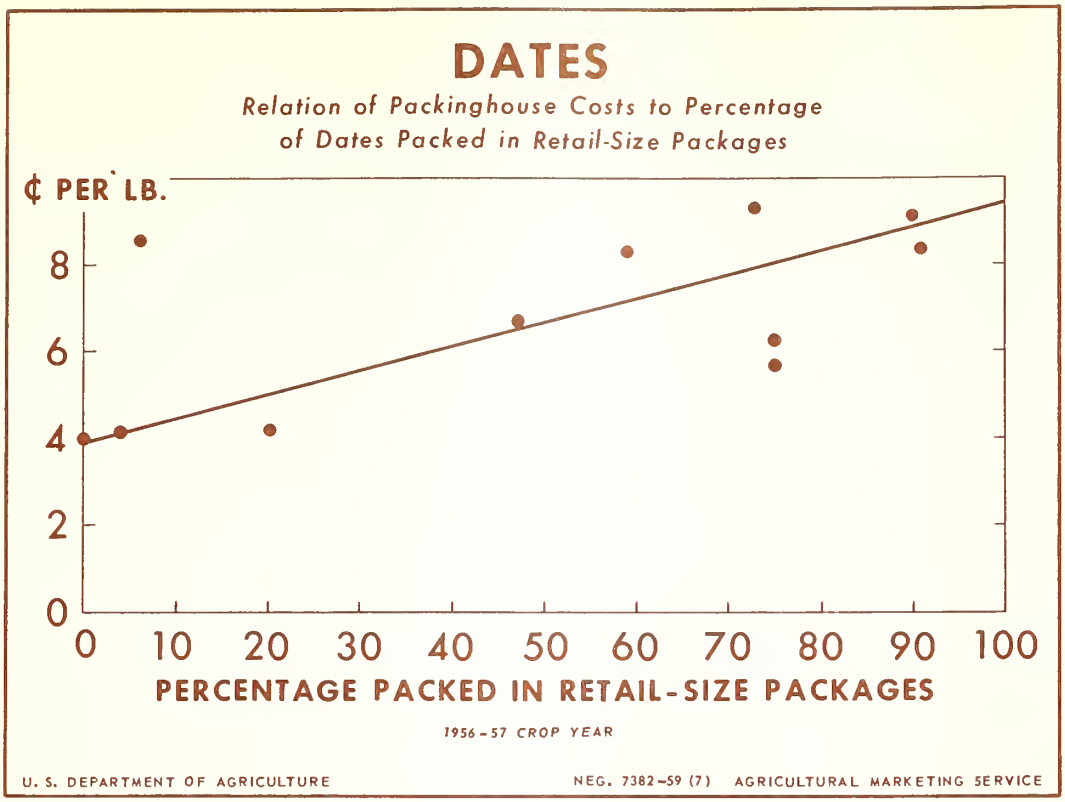

Figure 1

Other Products Handled

Five of the packinghouses packed products other than dates, usually in the off-season for dates. Grapes were handled in four packinghouses, grapefruit in two, tangerines in two, and tomatoes and pecans in one packinghouse each. One packer handled four products, another handled three products, while the three remaining packers handled only one product in addition to dates. In each of the five packinghouses, however, dates represented one-half or more of the total plant volume; and in three of the plants the volume of other products was minor. Packing these additional products in the plant is one way in which the overhead cost per unit of output can be lowered by spreading fixed costs of equipment and building over more units of output.

COST OF PACKING

Many factors affect the average cost per pound of packing dates. Among these are size of packinghouse, number of hours operated per season, management and productive efficiency, quality of dates, types of packages, and other factors. Information was obtained on only two of these factors--size of packinghouse and type of package. A graphic multiple regression analysis of the average cost per pound for packing dates, size of packinghouse, and proportion of retail packages indicated no relation between size of packinghouse and cost per pound. This apparent lack of correlation between costs and size of packinghouse probably results from lack of information on other of the above factors which affect costs. The approximate relationship between the average cost per pound for packing dates and the percentage of dates packed in retail packages is shown in figure 1. It shows that the average cost for bulk packaging is about 4 cents per pound. As the proportion packed in the smaller retail packages increases, the cost per pound increases. At 90 percent retail packages, the average cost is approximately 9 cents per pound.

To analyze segments of packinghouse cost as related to the proportion of retail and bulk packages, the packinghouses were classified into three groups. Group 1 includes the three largest packinghouses, packing from 75 to 90 percent of their dates in retail packages; group 2 includes eight packinghouses, of both medium and small size, packaging from 20 to 74 percent retail packages; and group 3 includes seven packinghouses of medium and small size, packaging less than 20 percent in retail packages.

Average operating, administrative, and building costs per pound for the three groups of packinghouses are shown in table 6. Labor cost is relatively low in groups 1 and 2 because of the relatively greater mechanization in these plants. Costs would be even lower if these packinghouses packed the same proportion of retail packages as group 3 packinghouses.

For packing materials and other supplies, the costs are lower for plants packaging mainly in bulk packages. The average costs are 1.74 cents per pound for group 1 packinghouses, 1.34 cents in group 2, and 1.32 cents in group 3.

Equipment depreciation and plant operating costs are considerably higher in the group 1 packinghouses. These costs amounted to 1.25 cents per pound for the group 1 packinghouses and about 0.4 cent per pound for the smaller packinghouses in groups 2 and 3.

Data on general administrative, advertising, and selling costs were rather sketchy for all but the largest packinghouses. However, for the three largest packinghouses, the average costs were 1.08 cents per pound for general administration and 1.50 cents per pound for advertising and selling costs.

Costs of depreciation on buildings ranged from 0.12 cent per pound for the three largest plants to 0.39 cent per pound for the smaller plants. Much of this difference probably results from excess capacity in the small plants. Taxes were about the same for the different packinghouse groups, the average ranging from 0.15 to 0.18 cent per pound. Building maintenance and repair ranged from 0.10 to 0.15 cent per pound in the three groups of packinghouses.

Table 6.--Costs per pound for plants packing varying percentages of dates in retail packages, 1956-57

Type of cost	75 to 90 percent (Group 1)	20 to 74 percent (Group 2)	Less than 20 percent (Group 3)
	Cents	Cents	Cents
Operating:			
Direct and supervisory labor	2.47	2.39	2.87
Material and supplies	1.74	1.34	1.32
Equipment maintenance and repairs	.28	.13	.13
Equipment depreciation	.36	.18	.21
Plant operating and other costs	.89	.21	.23
Total operating	5.74	4.25	4.76
Administrative:			
General	1.08	.43	1/
Advertising	.44	.25	0
Selling	1.06	0	0
Total administrative	2.58	.68	1/
Building:			
Depreciation	.12	.20	.39
Taxes	.18	.15	.17
Maintenance and repairs	.15	.10	.14
Total building	.45	.45	.70
Grand total	8.77	5.38	2/ 5.46

1/ Based on total quantity of dates received in packinghouse.
2/ Cost of administration not available.

SELLING PRACTICES

Type of Buyer

Although packers have a number of outlets for their dates, two kinds of buyers take the major share of the crop. Chainstores bought about half of the dates sold in 1956-57 (table 7). Produce and specialty wholesalers took about 25 percent. General-line grocery wholesalers, other retailers, bakers, candy makers, and the mail-order and roadside date shops bought the remaining 24 percent.

Most sales of dates are in relatively small lots. Brokers handled approximately 60 percent of the sales. Brokers sold approximately 75 percent of the dates going to chainstores (table 7), and approximately 96 percent of those to general-line wholesalers. The percentage sold through brokers declined to about 73 percent for produce wholesalers and dropped to 25 percent for specialty wholesalers.

Changes in Type of Buyer

For about one-third of the packinghouses, little change has occurred in the type of buyer during the past decade. The larger packinghouses have increased direct sales to chainstores. There was evidence that fewer sales were being made in carload lots f.o.b., and that it is more necessary for packers, rather than the final buyers, to maintain stocks in the market areas. Grocery and dried-fruit buyers have become more important than produce buyers to one large packer. Another large packer has confined business in the East to one sales account rather than selling through a number of brokers.

Table 7.--Percentage distribution of California date sales by type of outlet, and proportion sold through brokers, 1956-57

Buyer	Sales	Proportion sold through brokers
	Percent	Percent
General-line grocery wholesaler	3.7	96
Produce wholesaler	6.1	73
Specialty wholesaler	19.4	25
Chainstore	50.9	75
Other retailer	5.3	28
Candy manufacturer	2.2	68
Baker	1.4	1/
Other, including consumers	11.0	47
Total	100.0	60

1/ Data incomplete.

Method of Price Determination

The largest packers recognized that the price of dates could not be quoted independently of market conditions and competitors' actions. One of the large packers remarked, "We quote our price considering movement and supply of dates and considering other price quotations." Another large packer said, "Although we quote our price, it must remain reasonably competitive with the prices of the other major packers." A number of the medium-sized packers said that the price was negotiated between them and their buyers. Packers selling through the mail and roadside stands indicated that they, as sellers, set the price. Generally, mail-order businesses set the price and used advertising rather than price cuts to increase sales. More flexible prices were set for the roadside date-shop sales than for mail-order sales.

Inventory Control

At present, maintaining inventories of dates for future sales is not a major problem, since the heaviest consumption occurs at the Thanksgiving-Christmas season, after the heaviest period of harvest in November and December. Someone must maintain an inventory for sales at other times during the year, however, and this job now falls more heavily on the packer than it did in earlier years.

All three of the large packers and two of the medium-sized packers maintained inventories in their market area (table 8). The broker of one medium-sized packer maintained a limited inventory. None of the seven small packers or their brokers maintained inventories in the market.

A survey of date distributors in selected United States and Canadian cities in 1951 provided information relating to inventory problems of handlers and dealers of California dates. The study indicated that spoilage or keeping qualities of California dates was either a problem or a concern to 40 percent of the dealers and distributors in the United States and Canada (7). This suggests the importance of determining the keeping qualities of dates under different storage

Table 8.--Number of firms maintaining inventory of dates in market areas, 1956-57

Size of firm	Inventory maintained by--		Maintained no inventory	Did not answer
	Packer	Broker		
	Number	Number	Number	Number
Large	3	---	---	---
Medium	2	1	5	---
Small	---	---	5	2
Total	5	1	10	2

and handling conditions. Dealers should then be informed of the results of such studies and of the recommended storage and handling procedures for dates. Such research is being conducted by the Department. This would seem to be the first step in improving the spring and summer sales of dates.

Buyer Servicing

Sales generally were made as the buyers' needs indicated. Many of the sales were on a weekly or monthly basis. One large packer did not encourage his customers to purchase dates in quantities too large to maintain a satisfactory turnover of inventories.

Sales to buyers were about evenly divided between those sold out of stock and those packed to order for the buyer--48 percent from stock and 52 percent packed to order (table 9). Small packinghouses sold mostly out of stock. In all but the four largest packinghouses, each packer customarily sold by only one method--either out of stock or packed to order. Of nine packinghouses responding, five sold only out of stock while four sold only those packed to order.

Each of the three largest packers sold by both methods. Dates packed to order accounted for 53 percent of the total sales of these plants.

Table 9.--Percentage of dates packed to order and sold from stock, by size of packinghouse, 1956-57

Number and size of packinghouses	Packed to order	Sold from stock
	Percent	Percent
3 large	53	47
6 medium	46	54
4 small	25	75
13 plants	52	48

SALES EFFORT

Date packers reported that the small volume of sales of many of the packers limits their sales effort. Although 78 percent of the packers sell at least part of their dates direct to the retailer or final buyer, 5/ only 33 percent of the packers carried on direct selling efforts with their own staff.

Five packers sold through brokers and three of these supplemented the sales effort of the broker by calling on buyers with their own sales staff. The two largest packers did the major share of this type of selling.

5/ Approximately 40 percent of the total volume of dates is sold direct to the retailer or final buyer.

Packers were asked about the extent to which buyers seek them out. Their replies indicated that this usually did not happen. It was more prevalent among the smaller packers selling to retail shops in the packing area and packers with a well-established mail-order business. The buyers were more likely to seek out the packer in years of short supply. A sizable job of selling still remains, however, and the larger packers who have the volume of business to justify the expense do a considerable amount of promotion and advertising.

The three largest packers spent about $110,000 for advertising and promotion for the 1956-57 crop year which amounted to over 95 percent of the total advertising and promotional expenditures by all packers and approximately 3 percent of their sales. Point-of-sale material, dealer service work in major markets, and promotion with consumers accounted for the expenditures.

Smaller packers mostly advertised for mail orders, but did some other special advertising and promotion as well. Four packers mailed price lists and illustrated brochures to promote mail-order sales. One packer provided some point-of-sale material. A limited amount of advertising was done in health magazines.

Information about the nature of the demand for dates is needed to appraise the sales efforts of the date industry, especially with regard to: (1) the substitutes for domestic dates, and the degree of substitution as the relative prices of the products vary, and (2) the factors responsible for the relatively low and highly seasonal per capita consumption of dates.

The first point brings up the question of the competition between domestic and imported dates. Domestic and imported dates possess different characteristics, and date importers maintain that the two types of dates appeal to different users. The generally higher retail price for imported dates indicates that the two types are not good substitutes. However, there is reason to believe that these two types of dates compete and that some substitution between domestic and imported dates takes place as their relative prices vary. 6/

Regarding the second point, it would be desirable to know the amount of advertising, promotion, and education required for a certain increase in demand and its effect on the seasonality of demand. For example, advertising might expand the total demand for dates, but the increased demand might be as highly seasonal as before.

The problem is not only how much advertising and promotion are needed to increase sales, but also what types of advertising and promotion will yield the best results from the limited funds available. Part of the same problem is whether to direct the advertising mainly toward present users of dates or the relatively large proportion of households who are not familiar with dates and their uses. This suggests that it might be advisable for the date industry to select certain metropolitan areas in which to study the effectiveness of certain types of promotional and advertising activity on total sales and on the seasonality of sales.

6/ Foytik, Jerry. Impact of Imports on the California Date Industry. Unpublished mimeographed report prepared for the United States Tariff Commission hearings in September 1957. Giannini Found. of Agr. Econ., Univ. of Calif., Davis, Calif. 1957.

Table 10.--Dates: Acreage, yield, production, and returns to growers, California, 1920-58

Crop year	Acreage		Yield per bearing acre	Production of value 1/	Grower returns 2/		
	Bearing	Non-bearing			Per ton	Per pound	Per acre
	Acres	Acres	Tons	Tons	Dollars	Cents	Dollars
Average:							
1920-24	521	390	0.23	118	---	---	---
1925-29	804	580	.81	648	275	13.8	223
1930-34	1,161	1,615	1.82	2,109	76	3.8	138
1935-39	2,302	1,469	1.48	3,396	112	5.6	166
1940-44	3,440	834	2.54	8,738	346	17.3	878
1945-49	3,876	1,116	3.30	12,808	166	8.3	547
1950-54	4,521	592	3.66	16,560	119	6.0	436
1940	3,195	1,007	1.94	6,200	117	5.9	227
1941	3,225	953	1.80	5,790	150	7.5	269
1942	3,448	753	2.24	7,740	262	13.1	588
1943	3,613	690	2.98	10,770	466	23.3	1,389
1944	3,717	769	3.55	13,190	492	24.6	1,746
1945	3,846	808	1.77	6,800	398	19.9	704
1946	3,874	1,059	4.32	16,720	185	9.3	798
1947	3,805	1,250	2.68	10,180	81	4.1	217
1948	3,887	1,257	4.18	16,240	110	5.5	459
1949	3,969	1,207	3.55	14,100	158	7.9	561
1950	4,155	1,075	3.62	15,060	184	9.2	667
1951	4,328	916	4.35	18,840	105	5.3	457
1952	4,606	520	3.58	16,500	100	5.0	308
1953	4,815	270	3.53	17,000	130	6.5	459
1954	4,700	179	3.28	15,400	94	4.7	308
1955	4,598	150	5.50	25,300	104	5.2	572
1956	4,609	114	4.08	18,800	106	5.3	432
1957	4,667	141	4.99	23,300	113	5.7	564
1958	4,064	172	4.77	19,400	116	5.8	553

1/ Production of value equals total production in all years except 1952, when 2,300 tons were not utilized.

2/ Equivalent returns for naked fruit at growers' first delivery point. Five-year averages derived by dividing "total value" for 5 years by "total production of value" for 5 years.

California Fruit and Nut Crops, 1909-1955, Acreage, Production, Utilization, and Value (1). Data for 1956-58 taken from annual reports of the California Crop and Livestock Reporting Service.

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