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Acknowledgments

Grateful acknowledgment is made to the persons who aided in this study: to Dr. Kermit M. Bird, formerly of the Department of Agricultural Economics, and to Dr. Leif Verner, of the Department of Horticulture for advice on various phases of the study; to the managements of the retail grocery stores in Ada, Bannock, and Kootenai Counties for generous cooperation; and to the enumerators in these counties for assistance in collecting the data. Special thanks is due Dr. Jessie V. Coles, Dr. Marilyn Dunsing, and cooperating statisticians of the California Experiment Station for their part in this study.

This study was part of the Western Regional Marketing Research Project WM-26 on Factors Which Affect Consumer Purchase and Utilization of Fruits and Vegetables. This cooperative study involved the Agricultural Experiment Stations in the Western region, and was financed in part by funds appropriated under the Research and Marketing Act of 1946.

Location of Grocery Stores and Characteristics of Surveyed Counties

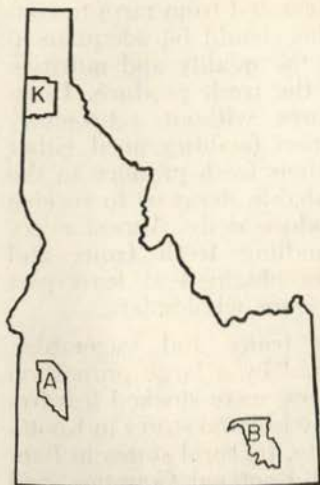
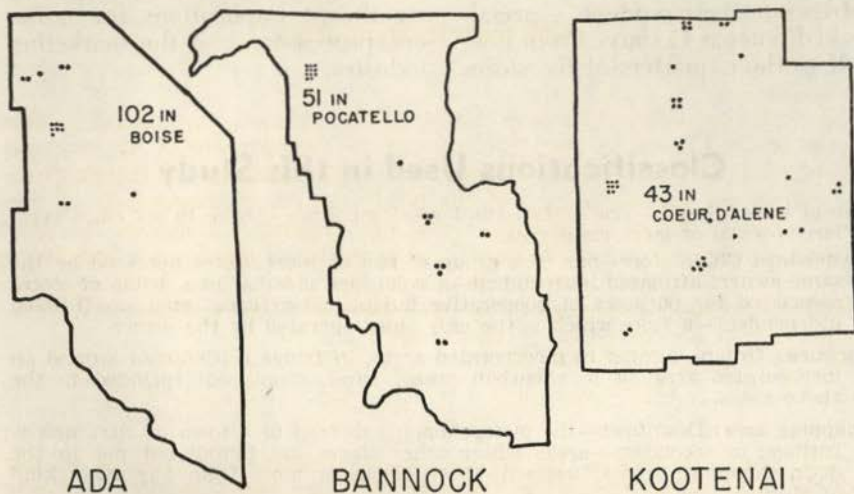


Table 1.—Characteristics of surveyed counties relative to state.

COUNTY	State population	State retail food stores ^a	% State retail grocery stores 1954	Number of stores surveyed
	1950 %	1954 %		
Ada	12.0	11.5	13.8	117
Bannock	7.1	7.0	8.2	71
Kootenai	4.2	6.6	4.7	81
All three counties	23.3	25.1	26.7	269

^aIncludes grocery, meat, fish, fruit and vegetable, confectionery, bakery products, and delicatessen stores.

Location of the three counties in which study was made.



Except as indicated in cities of Boise, Coeur d'Alene, and Pocatello, each dot represents a store included in the survey.

Summary and Conclusions

A survey of all (269) retail grocery stores in Ada, Bannock, and Kootenai Counties showed that most stores sold either fresh or frozen, or both forms of fruits and vegetables. A few small stores, isolated stores, and rural stores did not handle these products. Fresh fruits and vegetables were carried in more than 89 percent of the stores. Frozen fruits and vegetables were offered by 86 percent. Both fresh and frozen fruits and vegetables were generally more available in Ada and Bannock Counties than in Kootenai County.

The quality of the fresh fruits and vegetables was not studied directly. However, it may be reflected in the frequency of delivery of fresh produce and the care it receives in the store. Therefore, data were obtained on the number of times per week fresh produce is received and the facilities in the store for refrigeration. Day-time refrigeration of fresh produce was the rule. However, a considerable proportion of stores did not refrigerate their produce, especially in Kootenai County. From one-half to three-quarters of the stores

had at least three deliveries a week. If the fresh produce is properly refrigerated from farm to consumer, this should be adequate to maintain the quality and nutritive value of the fresh produce. However, stores without satisfactory refrigeration facilities need either to limit their fresh produce to the less perishable items or to receive fresh produce daily. Almost every store handling fresh fruits and vegetables obtained at least part of them from wholesalers.

Frozen fruits and vegetables, though sold by a large proportion of all stores, were stocked less frequently by isolated stores in Kootenai County, by rural stores in Bannock and Kootenai Counties, and by small stores and unaffiliated independent stores in all counties than by stores in the other classifications.

The disclosure by this study of areas and of types of stores where supplies of certain types of fruits and vegetables were lacking, has significant implications for growers, processors, and the marketing industry.

Classifications Used in this Study

Size of store: Small—one or two employees; medium—three to six employees; large—seven or more employees.

Ownership: Chain store—one of a group of two or more stores operated by the same owner; affiliated independent—a voluntary member of a group of stores associated for purposes of cooperative buying, advertising, etc.; unaffiliated independent—a store which is the only store operated by the owner.

Location: Urban—located in incorporated areas, in fringe settlements around an incorporated area, or in suburban areas; rural—stores not included in the above areas.

Shopping area: Downtown—the main shopping district of a town or city; neighborhood or secondary—areas where other stores are found, but not in the main shopping district; isolated—three blocks or more from any other kind of store.

Refrigeration: A refrigeration system in which air is artificially cooled, not merely ventilated; does not include spraying with water.

Fruit and Vegetable Marketing Facilities in Retail Grocery Stores in Three Idaho Counties

M. V. ZAEHRINGER*

Introduction

Why the Study Was Made

The study reported here was part of the Western Regional Research Project WM-26 on factors which affect consumer purchase and utilization of fruits and vegetables. It was financed in part from funds appropriated under the Research and Marketing Act of 1946. Information concerning the types and characteristics of present-day grocery stores and the kinds of facilities they had for marketing food products was obtained during a survey of all the retail grocery stores in three Idaho counties. This information was needed as a basis for selecting a specific sample of stores for a subsequent availability survey. The characteristics of the retail grocery stores have been described in a previous report.¹ The present report describes some of

the facilities and practices used in the retail marketing of fruits and vegetables. This survey was the first of its kind in the state.

Where the Study Was Made

Every grocery store in Ada, Bannock, and Kootenai Counties was surveyed. The location of the grocery stores and the characteristics of the surveyed counties relative to the state are given in Table I.

How the Study Was Made

During November and December, 1956, every retail grocery store in each of the three counties was visited by a trained checker who lived in the county. The information collected was obtained partly by personal interviews with the store managers and partly by surveying the store itself.

Marketing Facilities for Fruits and Vegetables

Retail Store Offerings of Fresh and/or Frozen Fruits, Vegetables

Almost all retail grocery stores in Ada, Bannock, and Kootenai

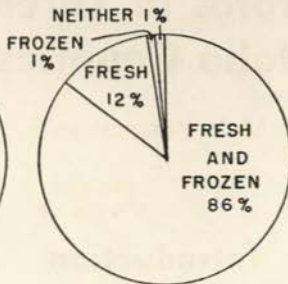
Counties sold either fresh or frozen, or both forms of fruits and vegetables.

*Head, Dept. of Home Economics Research, Agricultural Experiment Station, University of Idaho.
¹Zaehring, M. V., and Sauter, E. A., Jr., Egg and Poultry Marketing Facilities in Retail Grocery Stores in Three Idaho Counties, Experiment Station Bulletin 312, Idaho Agricultural Experiment Station, University of Idaho, Moscow, Idaho, 1959.

PERCENTAGES OF STORES CARRYING FRESH AND/OR FROZEN FRUITS AND VEGETABLES



Ada County



Bannock County



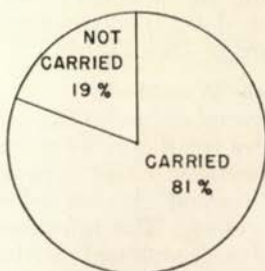
Kootenai County

Fresh Fruits and Vegetables

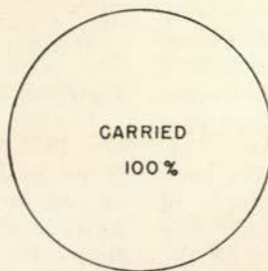
Fresh fruits and vegetables were sold by more than 82 percent of all stores. At least 90 percent of the

urban stores carried these products. The offerings of fresh fruits and vegetables in rural stores varied with the county.

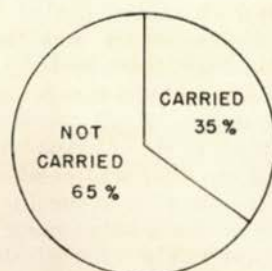
PERCENTAGES OF RURAL STORES CARRYING FRESH FRUITS AND VEGETABLES



Ada County



Bannock County

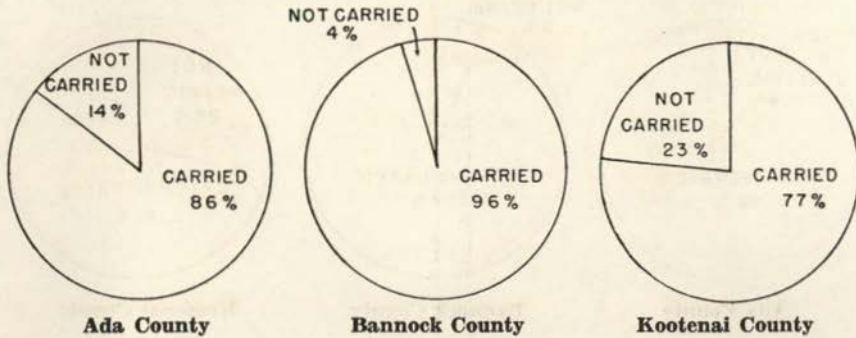


Kootenai County

The type of shopping area had little effect on the percentages of stores carrying fresh fruits and vegetables except that in Kootenai County only one-third of the isolated stores carried them.

More than 92 percent of all chain and affiliated independent stores offered fresh fruits and vegetables. These products were offered somewhat less frequently by the unaffiliated independent stores.

PERCENTAGES OF UNAFFILIATED INDEPENDENT STORES OFFERING FRESH FRUITS AND VEGETABLES



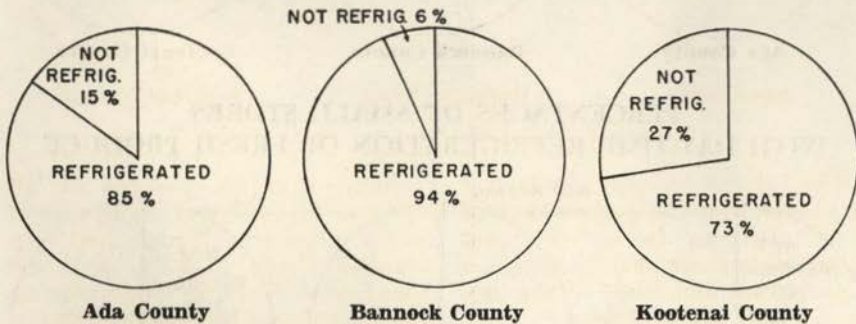
More than 94 percent of all medium-sized and large stores offered fresh fruits and vegetables. The offerings of the small stores in the three counties were quite similar to those of the unaffiliated independent stores in the same county.

Refrigeration of Fresh Fruits and Vegetables—A large proportion of the stores had day-time refrigeration of fresh fruits and vegetables.

ation of fresh fruits and vegetables. Night-time practices were not determined in this study. All rural stores carrying fresh fruits and vegetables in Ada and Bannock Counties, and 82 percent of the rural stores in Kootenai County refrigerated their fresh produce.

A smaller proportion of urban than of rural stores had day-time refrigeration of fresh produce.

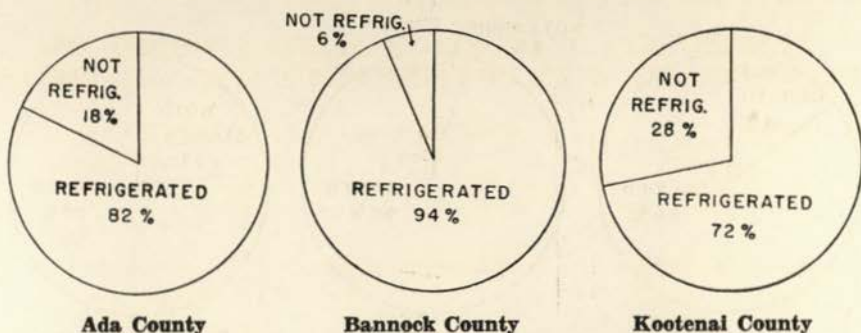
PERCENTAGES OF URBAN SOURCES WITH DAY-TIME REFRIGERATION OF FRESH PRODUCE



All chain stores and most of the affiliated independents had day-time refrigeration of fresh fruits and vegetables. However, from 6

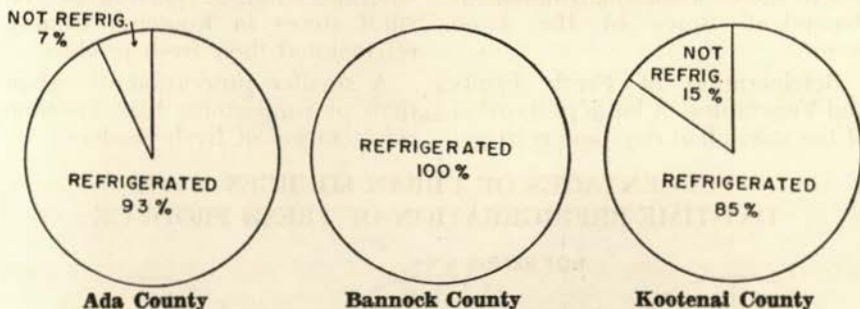
percent to 28 percent of the unaffiliated independent stores did not refrigerate their fresh produce.

PERCENTAGES OF UNAFFILIATED INDEPENDENT STORES WITH DAY-TIME REFRIGERATION OF FRESH PRODUCE

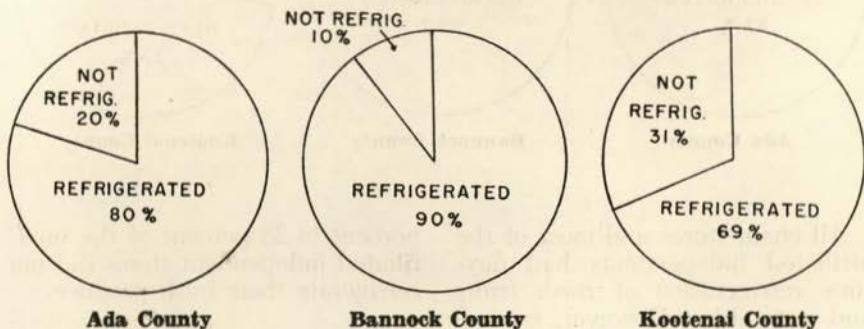


Most large stores had day-time refrigeration of fresh produce, but the proportions of medium-sized and small stores with day-time refrigeration varied with the county.

PERCENTAGES OF MEDIUM-SIZED STORES WITH DAY-TIME REFRIGERATION OF FRESH PRODUCE



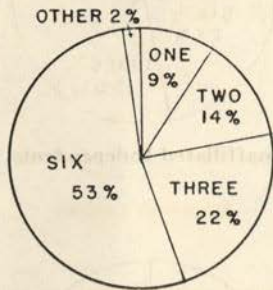
PERCENTAGES OF SMALL STORES WITH DAY-TIME REFRIGERATION OF FRESH PRODUCE



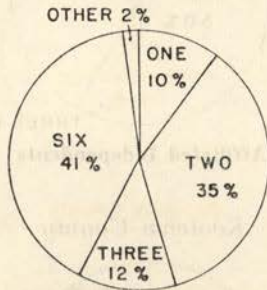
Frequency of Delivery of Fresh Fruits and Vegetables—About 10 percent of all stores had less than

two deliveries of fresh fruits and vegetables per week.

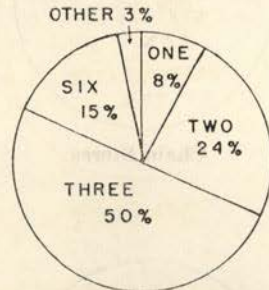
PERCENTAGES OF STORES WITH GIVEN NUMBER OF DELIVERIES PER WEEK OF FRESH FRUITS AND VEGETABLES



Ada County



Bannock County



Kootenai County

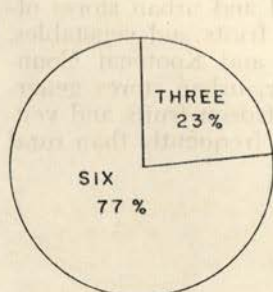
When the stores were grouped according to size the majority of all stores had at least three deliveries a week with one exception: the small stores in Bannock County generally had only two deliveries a week.

liveries per week. However, frequency of delivery of fresh produce was definitely associated with the type of ownership. A higher proportion of chain stores than of independent stores and of affiliated than of unaffiliated independent stores had 6 deliveries a week. The actual percentages, however, varied with the county.

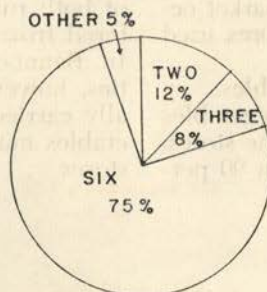
The type of shopping area had no effect on the number of de-

NUMBER OF DELIVERIES PER WEEK OF FRESH FRUITS AND VEGETABLES—PERCENTAGE OF STORES CLASSIFIED BY OWNERSHIP

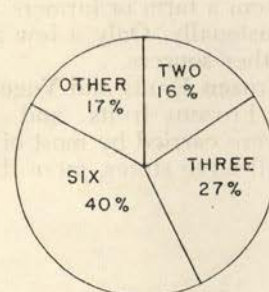
Ada County



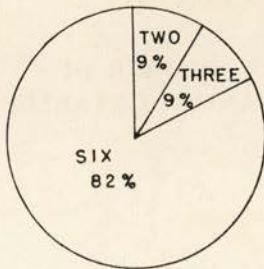
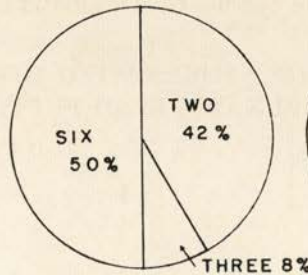
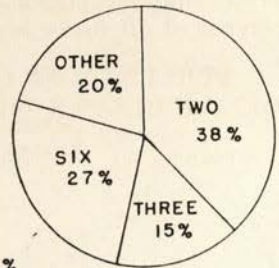
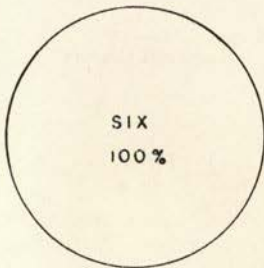
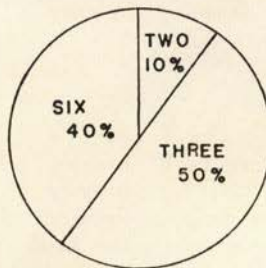
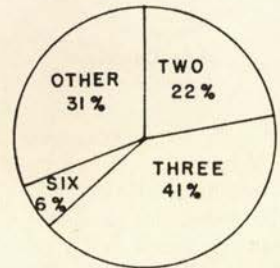
Chain Stores



Affiliated Independents



Unaffiliated Independents

Bannock County**Chain Stores****Affiliated Independents****Unaffiliated Independents***Kootenai County***Chain Stores****Affiliated Independents****Unaffiliated Independents**

Sources of Fresh Fruits and Vegetables—Ninety-seven percent of all retail grocery stores bought fresh fruits and vegetables from wholesalers. About three-fourths of the stores in Ada and Kootenai Counties and one-fourth of the stores in Bannock County which carried fresh produce obtained it from a farm or farmers' market occasionally. Only a few stores used other sources.

Frozen Fruits and Vegetables

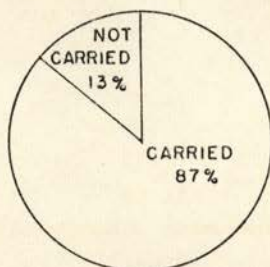
Frozen fruits and vegetables were carried by most of the stores. All large stores, more than 90 per-

cent of the medium-sized stores, and about 80 percent of all small stores carried these products. The pattern was similar for chain, affiliated independent, and unaffiliated independent stores, respectively.

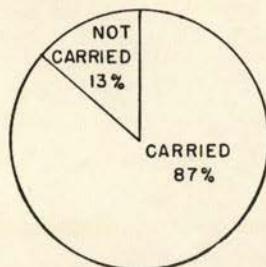
In Ada County, about 87 percent of both rural and urban stores offered frozen fruits and vegetables. In Bannock and Kootenai Counties, however, urban stores generally carried frozen fruits and vegetables more frequently than rural stores.

PERCENTAGES OF STORES CARRYING FROZEN FRUITS
AND VEGETABLES—CLASSIFIED BY LOCATION

Ada County

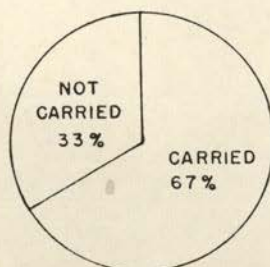


Rural

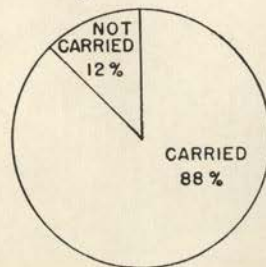


Urban

Bannock County

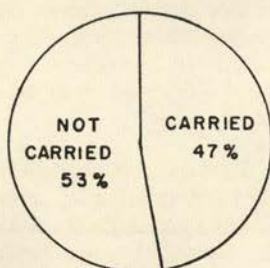


Rural

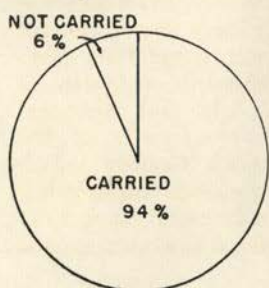


Urban

Kootenai County



Rural



Urban

The type of shopping area had some effect on the percentages of stores carrying frozen fruits and vegetables. At least 82 percent of the stores in the various types of shopping areas carried frozen fruits and vegetables except for

the following: In Bannock County, only 71 percent of the stores in the downtown shopping area carried these products and in Kootenai County, less than half of the isolated stores carried them.

THE UNIVERSITY OF MICHIGAN LIBRARY

Table 1



Table 2



Table 3



The following in Table 1 shows the results of the survey in the University of Michigan and the University of California. The results show that the University of Michigan has a higher percentage of students who are interested in the study of the history of the United States than the University of California. This is due to the fact that the University of Michigan has a longer history and a larger number of students who are interested in the study of the history of the United States.

The type of history that has been studied in the University of Michigan is of a higher quality than that which has been studied in the University of California. This is due to the fact that the University of Michigan has a longer history and a larger number of students who are interested in the study of the history of the United States.