

UNIVERSITY OF IDAHO

College of Agriculture

The Availability of Fresh and Frozen Poultry in Grocery Stores in Three Idaho Counties

E. A. Sauter, M. V. Zaehringer and C. A. Rickard

IDAHO Agricultural Experiment Station Bulletin No. 386 September 1962

The Availability of Fresh and Frozen Poultry In Grocery Stores in Three Idaho Counties

E. A. Sauter, M. V. Zaehringer and C. A. Rickard

In 1948, the average annual per capita consumption of chicken was 16.3 pounds. By 1958 it was over 28 pounds due largely to a more uniformly high quality product at reduced prices resulting from improved methods of production, processing, and merchandising.

During this period, 1948 through 1957, broiler production in the U. S. increased from 773 million to 3.3 billion pounds. The average wholesale price of fryers dropped from 43 to 25 cents per pound during the same period, a reduction in price that has undoubtedly been partially responsible for the increase in poultry consumed by the American public.

The study reported here was conducted in order to establish the relative availability pattern for the various fresh and frozen poultry-meat products in Idaho. This information should aid in pointing up areas of strength and weakness and help in expanding the market so that consumers may have maximum opportunity to purchase and use poultry meat.

REVIEW OF LITERATURE

Poultry constitutes a relatively large percentage of meat sales in many grocery stores. Smith (1953), in a survey conducted with two large food chains in the Delaware-Pennsylvania area, reported that poultry made up about one-third of all meat sales. Allewelt and Myers (1958) in a survey which excluded chains containing 11 or more stores found fresh fryers available in 54 percent of the stores and frozen fryers in 36 percent. Fresh stewing chickens were found in 34 percent of the stores, frozen stewing chicken in 15 percent. There was a definite seasonal variation in the availability of turkeys with 23 percent of the stores stocking fresh and 26 percent stocking frozen turkeys.

Gunn (1958) found that consumers in Washington would accept a wide range of size in fryers and that stores probably could not satisfy their customers by stocking only one size of fryer. These findings were based on results of a controlled size-preference test and mail questionnaires. Miles and Thomas (1958) reported that 63 percent of the stores surveyed in South Carolina had fresh whole fryers available while only 13 percent stocked fresh cut-up fryers, but most stores would cut them up if the customer desired it. They also found that 54 percent of the stores stocked fresh fryer parts and 34 percent of the stores frozen fryer parts. The most frequent reasons for not stocking frozen fryers were cost and lack of freezer space.

Freezing has often been used to convert fresh poultry into a more storeable commodity during periods of low prices or of high seasonal production. Kahle (1957), however, reported that the freezing of broilers or fryers was confined mostly to a few large processors with nationally advertised brands or to plants processing for well-known distributors. He also found that there was generally a higher retail mark-up on frozen than on fresh poultry. This might tend to limit the use of frozen fryers. Conalogue (1957) reported that over-all marketing margins were lower on both fresh and frozen fryers when they moved directly from processor to retailers in large volume. Buck (1958) reported that a substantially higher percentage of stores in Virginia sold fresh than frozen fryers.

PROCEDURE

The Idaho counties in this study were selected on the basis of population and sales volume of retail food stores. Within each county a representative sample of stores was drawn based on store characteristics obtained in a preliminary retail grocery store survey (Zaehringer and Sauter, 1959). These three counties contained approximately 25 percent of all retail grocery stores in the state. The sample from each county was statistically selected so as to be representative of the county, however, the three counties are not necessarily representative of the state.

The survey responses were expanded prior to analysis using the reciprocal of the number of stores drawn from each strata of the sample. This method was used to compensate for the disproportionate number of stores from the various strata.

The stores were visited once each month from April, 1957, through March, 1958, by a trained enumerator. Information was obtained concerning the various kinds and forms of poultry meat available at the time of each visit. No evaluation was made as to the quality of products available.

In addition to the monthly visits by enumerators, stores were visited twice during the survey period by the senior author. The purpose of these latter visits was to discuss retail merchandising of poultry meat with the managers of the store.

Classification of Stores: The stores were classified according to size, ownership, and the location of the store. The classification of stores is summarized in Table 1.

Classification of stores	A		Number of Stores by Bannock			Counties Kootenai	
	Survey	Total	Survey	Total	Survey	Total	
Small		65	4	40	4	64	
Medium		32	4	19	4	13	
Large		19	6	12	3	4	
Unaffiliated					-2		
independent		77	4	49	5	69	
Affiliated							
independent		25	4	11	5	10	
Chain	E	14	6	11	1	2	
Rural		16	2	3	3	17	
Urban	16	100	12	68	8	64	

Table 1 — Number of stores surveyed and total number of stores in Ada, Bannock, and Kootenai counties classified by size, ownership, and location.

The number of full-time employees or equivalent part-time employees was used as an indication of the size of the stores. Stores with 1 or 2 employees were classified as small stores, those with 3 to 6 employees as medium-sized, and stores with 7 or more employees as large stores.

The stores were classified into 3 groups on the basis of ownership, unaffiliated independent stores, affiliated independent stores and chain stores.

Stores were placed in 2 groups for classification as to location. Those stores located in or around incorporated areas were classified as urban and those located outside the above area were classified as rural stores. Less than one-fifth of the stores in the sample were classed as rural.

RESULTS

AVAILABILITY OF FRYERS

Fresh frying chicken was more readily available than any other fresh poultry meat product found in this survey. In Ada county 43 percent of all stores had fresh fryers in stock and many stores had them in both whole and cut-up form. The percentage of stores in Bannock county having fresh frying chicken was 62 percent, but in Kootenai county only 32 percent. The monthly variation in availability of fresh fryers is shown for the three counties in figure 1.

Fresh fryers were available much more frequently in large and medium-sized stores than in small stores, 89 and 73 percent respectively for large and medium as compared with only 25 percent of the small stores as shown in figure 2.

When stores are compared on a basis of ownership, an average of 44 percent of the unaffiliated independent, 62 percent of the affiliated independent and 76 percent of the chain stores surveyed had fresh fryers in stock. Nearly twice as many urban as rural stores stocked fresh fryers, 72 percent as compared to 37 percent respectively.



Figure 1—Monthly variation in availability of frying chicken classified by counties.

Size of Store	Fresh Fryers	Frozen Fryers	Frozen Fryer Parts
	%	%	%
Large		75	78
Medium		65	75
Small	25	61	23

Table 2 — Percent of stores stocking fresh and frozen fryers classified by size of store.

When the availability of frozen fryers was compared on a basis of the size of store, 61 percent of small, 65 percent of the medium-sized, and 75 percent of the large stores stocked frozen fryers. It will be noted from table 2, that the percentages of large and medium-sized stores having frozen fryers are somewhat below the corresponding figures for fresh fryers, but that the percentage of small stores stocking frozen fryers is much higher than for fresh fryers. This may well be expected since frozen fryers do not require such a rapid merchandising program as do fresh fryers.

Comparison on the basis of store ownership shows a similar trend. The percentages of unaffiliated and affiliated stores stocking frozen fryers were higher than those stocking fresh fryers.



Figure 2—Monthly variation in availability of frying chickens classified by size of store.

In contrast to this, the percentage of chain stores having frozen fryers was only slightly higher than the percentage of chain stores stocking fresh fryers.

Fresh and frozen fryers were available in about equal numbers of urban stores. In rural stores, however, frozen fryers were available in a substantially higher percentage of the stores.

On a yearly basis frozen frying chicken was the most prevalent form of poultry meat in grocery stores on the survey. Frozen fryers were found in 60 percent of the surveyed stores in Ada and Kootenai counties and in 74 percent of those in Bannock county. The monthly variation in availability of frozen fryers is also shown in figures 1 and 2. The wide fluctuations in availability of fryers found in small and medium-sized stores are not conductive to a high level of consumption. The variability appears to indicate a lack of consistent merchandising policy since the availability was often low at times of peak consumption. This is particularly serious to the local poultry industry because the stores in the small and medium-sized categories are the primary outlets for most of the local producers and processors. On the basis of these data it appears that the Idaho poultry industry should make a definite effort to establish better merchandising methods in the small and mediumsized stores. While these conditions are most serious in regard to fryers they are applicable to other classes of poultry as well.



Figure 3—Monthly variation in availability of roasting chicken classified by size of store.

AVAILABILITY OF ROASTING CHICKENS

Fewer stores had roasting chicken than fryers in stock. In Ada and Kootenai counties 11 percent of the stores stocked fresh roasters and in Bannock county 17 percent. The monthly variation in availability of fresh roasting chicken is shown in figure 3.

As stores became larger, higher percentages had roasting chicken available, the percentages were 7 for small, 22 for mediumsized and 32 for the large stores. A somewhat different trend was noticeable when stores were classified on a basis of ownership. Eighteen percent of the unaffiliated independent, 16 percent of the affiliated independent and 27 percent of the chain stores carried roasters.

Frozen roasters were available in 13 percent of the stores in Ada, 11 percent of those in Bannock and 10 percent of the stores in Kootenai county. Only 7 percent of the small stores stocked frozen roasters as compared with 18 percent of the medium-sized and 21 percent of the large stores. Twelve percent of the unaffiliated independent stores as compared to 21 percent of the affiliated and 20 percent of the chain stores stocked frozen roasting chickens.

The seasonal variation in availability of frozen roasters is also shown in figure 3.

AVAILABILITY OF STEWING CHICKENS

Fresh stewing chicken was available in 15 percent of the stores in Ada county, 29 percent in Bannock and 13 percent of the stores in Kootenai County. Over half of the large stores had fresh stewing chicken in stock whereas only a few of the smaller stores carried this item. The average percentages for stores stocking stewing chicken were 6, 30 and 56 percent for small, medium-sized and large stores respectively. A similar trend is noted when the stores are classified according to ownership. The percentages for unaffilated independent, affiliated independent and chain stores are 16, 28 and 61 percent resepctively.

Stewing chicken was not as readily available in the frozen form as in the fresh form except in small stores. In Ada county 10 percent of the stores stocked frozen stewing chicken. The percentages for Bannock and Kootenai counties were 14 and 6 percent respectively. Frozen stewing chicken was stocked by 7 percent of the small stores, 15 percent of the medium-sized and 14 percent of the large stores. When stores were classified by ownership percentages were 10, 19 and 13 percent for unafilliated independent, affiliated independent and chain stores respectively. Variation in availability of stewing chicken during the survey is shown in figure 4.



Figure 4—Monthly variation in availability of stewing chickens classified by size of store.

AVAILABILITY OF TURKEYS

Few stores carried fresh turkeys. Availability was usually limited to the larger stores and even here it was guite seasonal in nature. The seasonal variation is shown in figure 5. The average availability of fresh turkeys was 3 percent of the stores in Ada county, 8 percent of those in Bannock county and 2 percent of the stores in Kootenai county. Only 1 percent of the small, 6 percent of the medium-sized and 15 percent of the large stores had fresh turkeys. A similar trend is shown when stores are classified by type of ownership with an availability of 1, 4 and 20 percent respectively for unaffiliated independent, affiliated independent and chain stores. Less than 1 percent of rural stores had fresh turkeys as compared with 8 percent of the urban stores. Frozen turkeys were readily available throughout the year in large stores. Availability was also less seasonal in small and medium-sized stores than was true for fresh turkeys. In Ada county the average percentage of all stores with frozen turkeys was 14 percent, in Bannock county 35 percent and in Kootenai county 12 percent. For the survey as a whole, small stores averaged 7 percent, medium-sized stores 29 percent and large stores 59 percent. A similar trend is evident when stores are compared as to type of ownership with 68 percent of chain stores having frozen turkeys.

An average of only 8 percent of the rural stores stocked frozen turkeys as compared with 41 percent of the urban stores.





There was no New York dressed poultry of any kind found in any of the surveyed stores.

SOURCES OF FRYERS

It has been known for sometime that poultry and especially fresh fryers have been coming into Idaho and all western market areas from the major producing areas of the south and east. However, approximately 20 percent of the stores in this study carried poultry of various classes from more than one source. This is especially true for frozen poultry.

In Ada county 10 percent of the stores had fresh fryers from Idaho sources, 6 percent had fryers labeled as out-of-state and 28 percent were not identifiable as to origin. Forty-five percent of the stores in Bannock county indicated Idaho as the source of fresh frvers, 14 percent from out-of-state and 6 percent had fresh fryers which were not labeled as to source. In Kootenai county 20 percent of the stores had fresh fryers from Idaho, 11 percent from out-of-state, and 2 percent had fryers from unspecified sources. In Ada county when only large stores are considered, however, the percentages are 20 from Idaho, 14 from out-of-state, but 47 percent of the large stores had fresh fryers of unspecified origin. In contrast only one percent of the small stores had fresh fryers from out-of-state while 14 percent had fryers of unspecified origin. The balance of the small stores either stocked fryers from Idaho sources or did not stock them. Similar situations were found in Bannock and Kootenai counties. These findings are summarized in table 3.

Size of	Source* of Fresh Fryers					
store	Idaho	Out-of-state	Source not stated			
	%	%	%			
Large	% 51	20	29			
Medium		11	21			
Small		9	8			

Table 3—Percent of stores stocking fresh frying chicken from various sources classified by size of store.

*Some stores stocked fryers from more than one source.

Frozen fryers were found more frequently from out-of-state than from Idaho sources. This was true in each of the counties surveyed and for stores of all size classifications. Most of the frozen fryers of out-of-state origin came from either the north central states or from the south eastern states for Ada and Bannock counties while most of the frozen fryers originating out-ofstate found in Kootenai county came from the north central states with none from the south eastern states. Sources of frozen fryers are summarized in table 4.

Size of		Source* of Frozen Fryers					
store	Idaho	Out-of-state	Source not stated				
	%	%	%				
Large		100	2				
Medium	25	98	8				
Small	16	56	5				

Table 4—Percent of stores stocking frozen frying chicken from various sources classified by size of store.

*Some stores stocked frozen fryers from more than one source.

SOURCES OF ROASTING AND STEWING CHICKENS

Most of the roasting chicken found in the stores either originated in Idaho or the source was not stated. This was true for frozen roasting chickens as well as for fresh roasters. A similar situation existed with regard to stewing chickens. Some of the larger stores had roasting and stewing chickens from more than one source. Data showing the various sources of roasting and stewing chickens are summarized in tables 5 and 6.

Table 5-Percent	of stores	stocking	fresh	and	frozen	roasting	chicken	from
	various se	ources cla	ssified	by s	ize of s	tores.		

Size of		Source of Roasting Chicken						
	Id	Idaho		Out-of-state		Source not stated		
store	Fresh	Frozen	Fresh	Frozen	Fresh	Frozen		
	%	%	%	%	%	%		
Large		7	1	6	6	6		
Medium		13	1	1	5	8		
Small		4	3	2	2	2		

Table 6—Percent of stores stocking fresh and frozen stewing chicken from various sources classified by size of store.

		Source of Stewing Chicken							
Size of store		Idaho		Out-of-state		Source not stated			
	+	Fresh	Frozen	Fresh	Frozen	Fresh	Frozen		
	1.00	%	%	%	%	%	%		
Large		45	9	2	4	11	2		
Medium			11	1	1	6	4		
Small			4	0	1	1	4		

SOURCES OF TURKEYS

An average of only 15 percent of the large stores in Ada County stocked frozen turkeys from Idaho sources. In Bannock county 31 percent and in Kootenai county 44 percent of the larger stores had frozen turkeys originating in Idaho. The only exceptions were a few stores with fresh turkeys from Utah. A summary of the sources of frozen turkeys found in stores is shown in table 7.

Size of	Source of Turkey					
store	Idaho	Out-of-state	Source not stated			
	%	%	%			
Large		38	4			
Medium		18	2			
Small	4	4	2			

Table 7—Percent of stores stocking frozen whole turkeys from various sources classified by size of store.

PACKAGING OF POULTRY

Most fresh fryers were tray-packed with the next most frequent package being a plastic bag. Plastic bags were the most common package for frozen whole fryers, but a sizable percentage of the stores stocked frozen fryers in cartons. Tables 8, 9, and 10 summarize the percent of stores with various types of packages used for fryers.

Table 8—Percent of stores with various types of packages for fresh whole fryers classified by county.

		Туре	of Package	
County	Car	ton Tray	Bag	Unpackaged
	9/	%	%	%
Ada	10	59	22	9
Bannock	8	3 79	11	7
Kootenai		60	28	6

Table 9—Percent of stores with various types of packages for frozen whole fryers classified by county.

		Туре	Type of Package	
County	Carton	Tray	Bag	Unpackaged
Ada	% 40	%	% 60	%
Bannock	40 0	6	88	6
Kootenai		33	0	33

Table 10—Percent of stores with various types of packages for frozen cut-up fryers classified by county.

		Type of	of Package	•
County	Carton	Tray	Bag	Unpackaged
	%	%	%	%
Ada		28	1	1
Bannock		21	1	0
Kootenai		36	2	0

1

Practically all frozen turkeys were packaged in plastic bags and fresh turkeys were either unpackaged or in plastic bags. Most stewing chickens, both fresh and frozen, were tray-packed while roasting chickens were generally packaged in plastic bags.

SIZE OF PACKAGES

Frying chickens were found most frequently in packages of $1\frac{1}{2}$ to $2\frac{1}{2}$ pounds. This was true of both fresh and frozen fryers. However, more stores had fresh fryers in the $2\frac{1}{2}$ to $3\frac{1}{2}$ pound packages than they had frozen fryers. Practically all frozen fryer parts were in packages of less than $1\frac{1}{2}$ pounds, mostly in 1 pound packages. These findings are summarized in tables 11 and 12.

Table 11-Percent of stores stocking fresh fryers of various weights classified by county.

	Weight				
Under 2½ lbs.	21/2-31/2 lbs.	Over 3½ lbs.	Wt. not stated		
%	%	%	% 27 26		
		1	27		
		1	26		
	Under 2½ lbs. % 36 57 57	Under 2½ lbs. 2½-3½ lbs. % % 36 36 57 16	Under 2½ lbs. 2½-3½ lbs. Over 3½ lbs. % % % 36 36 1 57 16 1		

Table 12—Percent of stores stocking frozen fryers of various weights classified by county.

		Weight						
County	Under 2	1⁄2 Ibs.	21/2-31/2 lbs	. Over 3½ lbs.	Wt. not stated			
		%	%	%	%			
Ada		75	8	1	16			
Bannock		80	9	0	11			
Kootenai		77	15	2	6			

A higher percentage of the stores stocked turkeys weighing between 10 and 12 pounds than any other size stocked. However, an appreciable percentage of stores had turkeys as small as 6 pounds and as large as 20 or more pounds. The weight range of turkeys is summarized in table 13.

Table 13—Percent	of stores	stocking	frozen	whole	turkeys	of	various	weights
		classifie	d by con	unty.				

	Weight						
County	Under 10 lbs.	10-14 lbs.	14-20 pounds	Over 20 lbs.	Weight not stated		
	%	% 53	%	% 3	%		
Ada			13		4		
Bannock	12	51	15	13	9		
Kootenai	12	52	23	11	2		

The results of this study are presented in terms of the percentages of total stores in the various classifications. They do not take into consideration the large differences in sales volume among the stores. Frozen fryers were consistently available in a higher percentage of the stores than were fresh fryers; however, discussions with the managers of stores stocking both fresh and frozen fryers indicated that the sales volume was from 5 to 10 times greater for fresh than for frozen fryers. Also, as may be noted from table 2, only in stores classified as small did the percentage with frozen fryers exceed that for fresh fryers. However, since small stores constituted more than 60 percent of the entire sample, they exerted a great influence on the over-all availability pattern.

The consistent availability of both fresh and frozen fryers in large stores is apparent in figure 2. This uniformity is particularly striking when compared to the availability pattern of fryers in small and medium-sized stores. Some of the stores in these latter groups apparently have no regular merchandising program since frozen fryers could have been stocked by most stores. Zaehringer and Rickard (1961) found that frozen strawberries were available in over 90 percent of the same group of stores.

A few stores had frozen fryers which had been bought as fresh fryers and displayed for three or more days; those which were not sold were then frozen and merchandized as frozen fryers. This practice should be discouraged since freezing does not destroy bacteria that may have started to build up on the fryer and which could produce rapid deterioration after thawing.

Unpackaged frozen fryers were also being sold by some stores. This practice is not conducive to furnishing the consumer with a high quality product and is therefore detrimental to the industry since it could result in a lowering of demand for both fresh and frozen poultry. At a time of increasing production and more emphasis being placed on the merchandising of frozen fryers, it behooves all segments of the poultry industry to promote quality and quality-conserving practices by retailers as well as by producers and processors. Certainly any practices which are definitely known to be detrimental to quality should be discouraged.

According to store managers, competitive pricing was a factor in merchandising of fresh out-of-state fryers. Even more important, however, was uniformity of quality and large volume supply which managers of some of the large stores felt they could not obtain from local producers and processors. This presents a serious problem for the Idaho poultry producers since they must compete directly with the major fryer-producing areas for local markets. Generally, however, the producers are restricted to small and medium-sized stores which are relatively low-volume, high-cost outlets. They lack volume to supply the large outlets with a sufficiently uniform high quality fryer. Distance has ceased to furnish the protection of former years since transportation costs are often more than offset by the large-volume, low-margin production and processing in the major fryer-producing areas.

Roasting and stewing chicken were not so available as fryers in stores, and were obtained primarily from local processors. These products appear to be largely a by-product from egg production.

On the basis of this study there appears to be room for some expansion in the poultry industry in terms of meat production if it can be produced at a price that is competetive with the major producing areas. However, one of the limitations of the Idaho poultry industry appears to be the relatively small volume outlets, this is particularly true in the case of fryers. Generally the lower volume retail outlets are more costly to supply. Tray-packed frozen fryers may be one way in which the local industry can complete economically in the market even through the relatively low-volume retail outlets.

SUMMARY

A survey of the availability of poultry in grocery stores was conducted in three counties in Idaho. A stratified random sample was used with the stores classified according to size, ownership and location. The stores were visited at monthly intervals by a trained enumerator over a one-year period.

Frozen frying chicken was the most readily available form of poultry found on this survey. Fresh fryers were found much more frequently in large and medium-sized stores than in small stores. Frozen fryers were also stocked somewhat more frequently in large and medium-size stores, but the difference was not as marked as with fresh fryers. No data concerning the volume of sales were obtained; however, store managers indicated the sales volume of fresh fryers was 5 to 10 times greater than that of frozen fryers.

Roasting and stewing chickens were available less frequently than fryers. Appreciably more stores stocked stewing chicken than roasting chicken.

The availability of fresh turkey was very seasonal in nature, with large stores merchandising fresh turkeys more often than small stores. Frozen turkeys were more readily available than fresh and the availability was somewhat less seasonal than that of fresh turkeys.

The majority of frozen fryers and a high percentage of the fresh fryers were from out-of-state sources. In contrast to this, most of the stewing and roasting chicken surveyed in stores of all size and ownership classifications were from local sources. Practically all fresh turkeys were of Idaho origin, while most frozen turkeys were from out-of-state. Fresh fryers were most frequently packaged in tray-packs, while frozen fryers were in plastic bags or cartons. Roasting chicken was usually packaged in plastic bags and stewing chicken in tray-packs. Turkeys were usually packaged in plastic bags.

There was no New York dressed poultry in any of the surveyed stores.

It is recommended that: (1) Retail stores not freeze poultry after it has been held in display cases as fresh poultry. (2) The Idaho poultry industry promote a more consistent and uniform merchandising policy for poultry in the small and medium-sized stores to assure maximum availability of poultry to the consumer. (3) The industry consider the use of high quality in-plant frozen fryers as a means of expanding markets and the availability of poultry.

REFERENCES

- Allewelt, R. W. and M. Myers, Poultry Availability and Merchandising in Retail Stores. Marketing Research Report No. 265 AMS U.S.D.A., 1958.
- Buck, J. T., Marketing Poultry Meat in Retail Food Stores. Virginia Agr. Exp. Sta. Bul. 488, 1958.
- Conlogue, R. M., Marketing Costs and Margins for Chicken Fryers and Fowl. U.S.D.A., Marketing Research Report 195, 1957.
- Gunn, T. I., Consumer Acceptance of Fryers. Wash. Agr. Exp. Sta. Circular 337, 1958.
- Kahle, H. S., Availability of Fresh or Frozen Ready-to-Cook Poultry. U.S.D.A. AMS 158, 1957.
- Miles, J. F. and W. H. Thomas, Marketing Poultry Meats in Retail Food Stores in South Carolina. South Carolina Agr. Exp. Sta. Bul. 455, 1958.
- Smith, R. C., Factors Affecting Consumer Purchases of Frying Chickens. U. of Del. Agr. Exp. Sta. Tech. Bul. 298, 1953.
- Zaehringer, M. V. and C. A. Rickard, Availability of Fruits and Vegtables in Selected Retail Grocery Stores in Ada, Bannock, and Kootenai Counties. Idaho Agr. Exp. Sta. Bul. 353, 1961.
- Zaehringer, M. V. and E. A. Sauter, Jr., Egg and Poultry Marketing Facilities in Retail Grocery Stores in Three Idaho Counties. Idaho Agr. Exp. Sta. Bul. 312, 1959.