

PREVAILING PRACTICES OF PRODUCERS, RETAILERS  
AND CONSUMERS IN HANDLING MARKET EGGS IN  
THE CROCKETT, TEXAS, TRADE TERRITORY

by

JOHN WILLIAMS

B. S., Prairie View State College, 1925

---

A THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Poultry Husbandry

KANSAS STATE COLLEGE  
OF AGRICULTURE AND APPLIED SCIENCE

1948

Docu-  
ment  
LO  
2668  
.74  
1948  
WS  
2.2

Table of Contents

	Page
INTRODUCTION . . . . .	1
Purpose . . . . .	1
Scope of Study . . . . .	2
Review of Literature . . . . .	2
Method of Procedure . . . . .	5
Recapitulation of the Pure Food Law and Its Use by Handlers of the Egg Market . . . . .	6
PRODUCER GROUP . . . . .	7
Tabulation of Data . . . . .	7
Results of Surveys . . . . .	8
Summary and Conclusions . . . . .	12
RETAILER GROUP . . . . .	13
Merchandising Practices of Ten Retailers . . . . .	13
Summary and Conclusions . . . . .	16
CONSUMER GROUP . . . . .	18
Consumer Survey . . . . .	18
Summary and Conclusions . . . . .	21
ACKNOWLEDGMENTS . . . . .	23
LITERATURE CITED . . . . .	24
APPENDIX . . . . .	25

## INTRODUCTION

The present study was begun in order to provide information concerning the prevailing practices and production of farmers and other poultry raisers in their management activities in the immediate trade territory of Crockett, Texas. To accomplish this goal, a questionnaire was prepared consisting of 12 questions which dealt with production problems on the farm, as for example volume of production; management practices, such as feeds and feeding, disease and parasite control, as well as knowledge of the Pure Food Standard as it relates to graded and quality eggs. Personal visits were made to 30 producer families to collect data for the study.

To further check the producer's marketing practices along with production practices, a parallel study was made through retail merchants to ascertain consumer reaction to the quality of eggs offered for sale which had been purchased from local producers.

Contact with producer, retailer and consumer provided a cross section of information which revealed the commercial status of the local producer's sales as compared with the total volume of eggs sold locally.

### Purpose

The purposes of this study were to ascertain the prevailing practices of producers in caring for hens in the laying house and its immediate environs, the prevailing practices of local buyers in procuring and handling eggs for retail purposes, the policies by which at least 30 consumer families were guided in purchasing

market eggs and the extent to which the consuming public was familiar with the Pure Food Law Standard and requirements as they related to eggs.

#### Scope of Study

The study involved a survey of 30 producer families, 10 chain stores and 30 consumer families in 10 communities of Houston County, Texas. The communities were Crockett, Lovelady, Grape-land, Kennard, Weldon, Pennington, Radcliffe, Weches, Porter Springs and Augusta.

#### Review of Literature

Knudsen and Thomsen (1939) found that New York City had definite regulations governing the sale and distribution of market eggs. In New York City, eggs must be labeled with official grade, and penalties are provided for violations of the grading law. In general there are four classes of eggs sold in retail stores in New York City. Although some stores use only three classes, Funk (1939) states that removing soiled eggs from the retail markets and thereby presenting only clean eggs should stimulate shell egg consumption. Many eggs with soiled shells have excellent interior quality. Cleaning eggs properly increases the volume of high-quality eggs.

Flatt (1939) states that deterioration in the initial quality of eggs is undergoing investigation. The quality of eggs passing into consumption has been greatly improved. Annual per capita consumption has risen from 118 to 156 eggs since 1913.

Gray (1939) said that the managers of retail chain stores handled eggs to safeguard quality until they reach the consumer. An advertising program was carried out to educate the consumer to high-quality eggs.

Stevens (1947) made a survey of Mansfield and Shelby, Ohio. The city of Mansfield was divided into 21 sections. There were 509 personal calls made in Mansfield and 67 calls made in Shelby. From the records obtained, it seems that egg usage was distributed fairly uniformly throughout the year. Approximately 66 percent of the eggs were for table use, while 40 percent were used for cooking. Three percent of the consumers used eggs for table use only, while four percent used eggs for cooking only. It was also found that almost two-thirds of the consumers purchased eggs weekly, and one-fourth bought every other week.

The highest percentage of the consumers who bought eggs direct from the farm was among the high-income group. A small percentage of the low-income group purchased eggs from the grocery stores. There was very little egg color preference in Mansfield. However, in the high-income group 25 percent showed preference for brown eggs.

Only 18 percent of the eggs were purchased on a quality graded basis. Twenty-eight percent of the white population high-income group purchased grade A eggs. More eggs were purchased on size grade than on quality grade.

According to this survey, 93 percent of the consumers kept eggs in the refrigerator, while only 54 percent of the retail stores kept eggs under refrigeration.

Funk (1948) stated that to minimize losses in washed eggs the temperature of the cleaning solution should be kept above that of the egg temperature. He recommended the use of germicidal solutions, such as one percent lye water, which is helpful in preventing loss in warm weather. Shell eggs are pasteurized by immersing them in water at 130° F. for 15 minutes.

Dankers (1948) found that eggs were marketed in a variety of ways. Some were delivered by producers directly to retailers and consumers. Some eggs were transported long distances and were handled by several dealers from the time they left production areas until they reached consumers. Some of the eggs were broken and frozen for storage and a small proportion were dried and used in that form.

A special survey was made of eggs sold by retail stores in the city of Minneapolis, Minnesota. Some of the same weaknesses in grading systems found at the producer level were found at the retail or consumer level. Some chain stores sold eggs in three different grade classifications. This means that many stores were offering eggs to consumers in only one grade classification. This information suggests that a consumer egg-grading system must be comparatively simple if it is to be practical and if it is to be accepted and used by retailers. It suggests further that the present United States consumer grade programs need much simplification.

Because of confusion and lack of uniformity in purchase grades, it appears highly desirable to supplement the present official United States wholesale grades with a system of uniform purchase and consumer grades. If this were done, the official United

States Standards of quality for individual eggs should apply. This should result in a more orderly system of marketing eggs.

#### Method of Procedure

Visits to the homes of 30 producer families, 10 chain stores, and 30 consumer families were made to secure information. In these personal contacts, it was found that the readiness of response to inquiries and accuracy of information sought were, in most cases, directly proportionate to the volume of production, consumption and marketing practices of the persons visited.

A set of questionnaires was prepared for each of these groups. Each set sought to discover prevailing practices on phases of their participation in the triple approach.

As a follow-up, two groups were interviewed three times.

As set forth in the preceding discussion under purpose of study, it was shown that the four objectives of this study were confined to 30 families of varying degrees of managerial abilities and environmental conditions.

Questionnaires were used to secure data with respect to practices of production, consumption and distribution. For the purpose of determining the degree of compliance with the Pure Food Law, a copy of the law was secured as a guide in presenting the study to individuals visited.

Thirty families were selected to ascertain the prevailing production practices, consumer demands and methods of compliance with the Pure Food Law in catering to consumers. A companion study of consumer demand and market practices was also secured

from three local chain stores for verification and comparison of practices used by individuals in the three categories: producer, retailer and consumer.

Copies of the Pure Food Law were received upon request from the Texas State Board of Health and Secretary of State with reference to meeting the standards for preparing eggs for market. This was done to determine:

1. What do the Pure Food Laws require in market eggs?
2. How often are inspections made per dealer per year?
3. How many inspectors are employed?
4. Was this work adequately financed to do a satisfactory job?

Thirty producer families were contacted two times at intervals of three months to determine production practices. The chain stores were contacted three times each at intervals of one to two weeks to secure information which would show merchandising practices.

Thirty consumer families were contacted weekly for three weeks. These were grouped according to annual net income, as follows:

1. Ten families with annual net income of less than \$1,000.
2. Ten families with annual net income from \$1,000 to \$2,000.
3. Ten families with annual net income above \$2,000.

Recapitulation of the Pure Food Law and Its Use  
by Handlers of the Egg Market

The Federal Food and Drugs Act was used as a standard in mak-

ing investigations preparatory to establishing the degree of compliance of producers and handlers of eggs for trade. Herewith is enclosed an excerpt of that law.

Under the Food and Drugs Act, eggs, in common with other articles of food, are adulterated if they consist wholly or in part of a filthy, decomposed, or putrid substance. Section 2 of the act prohibits the shipment in interstate commerce of foods which are adulterated, and it is plain that this prohibition applies to the shipment in interstate commerce of current receipts or of rejects from candling rooms or of any other grade of eggs in the shell unless the filthy, decomposed, or putrid eggs have been removed.

In the opinion of the department, shipments consisting in whole or in part of eggs which contain yolks stuck to the shell, moldy eggs, black spots, mixed rots, addled eggs, black rots, and any other eggs which are filthy, decomposed, or putrid are in violation of the law.

The investigations of the department have shown that it is commercially practicable, by the method of candling, substantially to eliminate from any given shipment the eggs which are filthy, decomposed, or putrid. It is not the practice of the department to base proceedings under the Food and Drugs Act on shipments of eggs unless there are present larger percentages of bad eggs than are ordinarily present in recognized commercial grades of candled eggs. Country shippers who are not certain of the freshness of their eggs should candle them before shipping them in interstate commerce.

#### PRODUCER GROUP

##### Tabulation of Data

At intervals of two weeks, personal interviews were held with the managers of 10 retail grocery stores which purchased eggs from local producers and handled eggs for incorporated poultry and egg associations.

These stores, as revealed in the study, sold the eggs to local

consumers in their respective trade areas. Efforts in this investigation were designed to ascertain the extent to which the consumers purchased on the basis of quality and price or were directed by a knowledge of the Pure Food Law in making purchases. To determine the trend followed, 17 points of information related to source of supply, handling, pricing and purchasing were sought. Three interviews were made to 3 retailers and one interview to the other 7 of the 10.

#### Results of Surveys

During the month of January, 1947, the writer made a survey of 30 poultry producers in Houston County. Portions of five communities were included. The purpose of the survey was to determine the prevailing practices in egg production. Twelve questions were selected for this investigation. The producers interviewed were not in the poultry business as a major enterprise but were raising poultry as a side-line to produce eggs to supply the family needs. However, eggs produced in excess of family needs were sold to pay for expenditures for feed.

Producers selected had 40 or more laying hens. Of the 30 producers interviewed, all lived in small towns and villages, some of whom had limited acreage for farming. The wife was sought out to answer the 12 questions designed to give an accurate account of all the 11 phases of care and management of the flock. Answers were obtained by direct questioning and by discussion.

In May, 1947, a second survey was made in the same five communities and to the same 30 families contacted in the first survey.

Questions in the first survey were repeated in the second survey to ascertain what changes, if any, had been made in the management practices between January and May. It was found that new practices had been instituted. It was also found that there had been an increase in the number of pullets on hand.

The questions used in this survey are shown in the Appendix. Sixteen main headings were necessary to complete the investigation.

A detailed report of the information obtained is given in Table 1.

Table 1. Poultry management practices followed by thirty producers.

Management practices	Numbers	Percentage
Size of flock		
Hens	2329	67.9
Pullets	1099	32.1
Care of flock		
Free range	26.5	88.3
Confined	3.5	11.7
Types of disinfectants		
Creosote	14.5	48.0
Creosote and stock dip	3.5	12.0
Stock dip	3.0	10.0
Creosote and lime	3.0	10.0
Lime	2.0	7.0
Lye	1.5	5.0
Stock dip and lye	1.0	3.0
Creosote, stock dip and lime	1.0	3.0
Creosote and lye	.5	2.0
Are separate breeding pens used?		
Yes	4.5	15.0
No	25.5	85.0
Frequency of gathering eggs		
Daily	17.5	58.0
Twice daily	10.0	33.0
Thrice daily	2.5	8.0
Where are eggs stored?		
Feed room	11.5	58.0
Porch	10.0	23.0
Kitchen	3.0	10.0
Living room	3.0	10.0
Cellar	2.0	7.0
Ice box	.5	2.0
How often are eggs marketed?		
Semi-weekly	14.0	47.0
Weekly	15.5	52.0
Bi-weekly	.5	1.0
Type of litter used in nests		
Straw	14.5	48.0
Hay	8.0	27.0
Straw and hay	7.5	25.0

Table 1 (cont.)

Management practices	Numbers	Percentage
Type of litter used on floors		
Sand	19.0	63.0
Straw	6.0	20.0
Sawdust	3.0	10.0
Shavings	2.0	7.0
How often is litter renewed?		
Weekly	8.0	27.0
Every two or three weeks	7.0	23.0
Monthly	3.5	12.0
Semi-annually	6.5	21.0
Annually	5.0	17.0
Do you use self-feeders?		
Yes	16.5	55.0
No	13.5	45.0
Types of feed grown		
Corn	9.0	30.0
Corn and oats	6.0	20.0
Corn and milo	4.5	15.0
None	4.5	15.0
Corn, oats and milo	3.0	10.0
Oats	1.5	5.0
Corn, kafir and milo	1.5	5.0
Frequency of worming the laying flock		
Quarterly	2.5	8.0
Semi-annually	13.5	45.0
Annually	9.5	32.0
Not at all	4.5	15.0

### Summary and Conclusions

These data show that the 30 flock owners interviewed kept an average of 78 hens and 37 pullets which is the reverse of the present-day recommendations. Less than 12 percent confine the flocks; almost half use Creosote as a disinfectant, while only 15 percent use separate breeding pens when reproducing the flock.

It was commendable that 42 percent gathered the eggs twice or more frequently each day, but only 9 percent stored the eggs in a suitable place. Almost one-half of the flock owners marketed the eggs twice a week, a practice which is recommended. Straw and hay were found to be popular as nesting material.

Either sand, straw, or sawdust was used for floor litter in more than 90 percent of the poultry houses. The frequency of renewing litter ranged from 27 percent, which were cleaned weekly, to 17 percent cleaned annually.

Self feeders were used in more than half of the flocks and a considerable proportion of the cereal grain fed was grown. Corn and oats were the most common.

The practice of worming the laying flock was used by more than 95 percent of the owners, the semi-annual treatment being most common.

Higher egg production could be obtained by keeping more pullets than hens. Obviously no attempt is made to use improved breeding methods. Better care of the eggs after they are gathered would aid in maintaining quality. In general the management practices followed conform to present recommendations.

## RETAILER GROUP

## Merchandising Practices of Ten Retailers

Seventeen areas of study were chosen from which to ascertain desired information regarding the merchandising practices of local retailers in handling eggs. The scope of this inquiry included such phases of handling as would be in keeping with the United States Food and Drug Administration regulations. A list of these questions will be found in the Appendix. Retailers were chosen in local towns and villages which handled most of the eggs produced for sale in these respective localities.

Most of the consumers were impressed with the interest retailers had in selling them good eggs. Various methods, such as the use of cold storage, candling, grading, separation of the soiled from the clean eggs, to determine and maintain quality, were used by these retailers.

The information gathered is presented in Table 2.

Table 2. Merchandising practices of ten retailers.

Merchandising practices	Percentage
Sources of market eggs	
Farmers	60
Farmers, cold storage and others	10
Farmers and others	10
Farmers and cold storage	20
Volume of eggs handled per week	
For 10 retail stores 255 cases	
How are eggs cared for while holding for retail purposes?	
Kept stored in refrigerator and ice box	40
Candled and separated dirty from clean eggs	20
Candled	20
Separate dirty and clean eggs	10
Candled and kept in cold storage	10
Are cold storage eggs sold?	
Yes	30
No	70
Are dirty and clean eggs separated?	
Yes	90
No	10
Are eggs candled during the summer months?	
Yes	90
No	10
Are eggs graded as to quality, size and cleanliness?	
Yes	70
No	30
Changes recommended by 10 retailers to im- prove quality of eggs	
Refrigerator	10
Purchase only graded eggs	80
Purchase only graded eggs and refrigeration	10
Regional market quotations followed	
Chicago market quotations	10
Local demand	90
Do you cater to competitors' prices?	
Yes	20
No	80

Table 2 (cont.)

Merchandising practices	Percentage
The usual spread in buying and selling prices	
2.5 cents	20
3.0	10
3.5	10
4.0	20
5.0	30
8.0	10
Does spread vary for different seasons of the year?	
Yes	40
No	60
Retailers offered suggestions to improve the marketing of eggs	
Sell graded eggs	30
Make frequent sales	60
Sell graded and refrigeration eggs	10
Policies followed in purchasing eggs from producers	
Case run	40
Case run and pay cash	20
Graded basis and pay cash	30
Pay cash	10
Factors in determining prices of eggs	
Grade and quality	10
Quality	40
Quality and cleanliness	40
Quality, cleanliness and color	10
Do you pay a premium for white or brown eggs?	
White eggs	10
Brown eggs	90
What are your chief gripes in handling eggs?	
Deterioration and soiled	40
Soiled	50
Ungraded eggs	10

### Summary and Conclusions

There were several factors taken into consideration for price fixing, namely, availability of storage facilities, volume and frequency of sales and consumer quality demands. Competitors' prices offered no incentive to reduce prices or elevate standards of quality. The demand of shell color was negligible, hence no variation in prices because of color.

Farmers and other commercial producers were encouraged to separate eggs as to cleanliness, size, weight and color at home, thus eliminating the necessity of discounting the eggs at the store.

Table 2 includes tabulations respecting retailer participation in the handling of eggs for both producers and consumers. Farmers constitute 60 percent of the sources of the egg supply. Adequate provision was made for keeping the 255 cases of eggs handled per week in cold storage from time of purchase until sold. Besides precautionary procedures of refrigeration, the eggs were candled and graded. In grading, the soiled eggs were kept separate from the clean eggs, even though they were of the same quality. Eighty percent of the retailers recommend purchasing only eggs which have been previously graded by the producers. This is suggested as a means of improving better quality eggs being brought to market and to cut down on the overhead expenses of preparing and maintaining those bought for the trade. Opinion and practice vary in price fixing. Twenty percent consider competitor prices, while 80 percent set their own prices irrespective of their competitors, but are governed by price and demand.

There was a rather sharp contrast between the spread both with respect to buying and selling of eggs. It was shown that the net profit as predetermined by price fixing ranged from 2.5 cents to 8.0 cents per dozen of eggs handled. Sixty percent of the eggs were cash purchases. The quality and cleanliness factors predominated in determining egg sales. This was shown in the basic selections when consumers made purchases.

The color of the eggs exerted very little influence upon trade. Ninety percent of retailers paid the same price for white as for brown eggs. Most eggs were purchased from local producers and sold to local consumers. Daily market quotations were used only as a guide to limit supply to demand rather than to purchase for wholesale delivery.

#### CONSUMER GROUP

##### Consumer Survey

The investigation revealed a diversity of opinions respecting the selection of quality eggs for home consumption. Efforts were made to determine the relative sources of supply, methods of refrigeration, as well as the determining factors which influenced buyers of eggs in making purchases.

To determine the attitude of trade, a survey was made on 10 chain stores to ascertain answers to inquiries made by purchasers respecting quality, standardization and frequency of purchases.

The study was broken down into 12 different phases of approach. The data from communities were tabulated by numbers rather than by names.

The percentage of consumers reporting gripes in buying eggs were highest among those who said that eggs were priced too high.

It is commendable to note that 208 families had access to refrigeration for keeping eggs. There was a favorable comparison as of the highest percent of consumers who were conscious of decomposed eggs and the low percentage of those who did not purchase inedible eggs.

The interpretation of the findings from the 10 communities was attempted with the thought always in mind as set forth in the purpose of this entire survey. The results are given in Table 3.

Table 3. Practices used by thirty consumer families in purchasing eggs from retailers.

Purchasing practices		Total
Nationalities	Families surveyed	
	White	Negro
	134	166
		300
Family membership	Under 5 yrs. old	5 yrs. & older
	208	932
		1140
Sources of egg purchases		
Individual producers		Retailers
	249	40
		289
Weekly purchases of eggs by dozens		
Number purchasing from 1 to 2.5 dozens		137
Number purchasing from 3 to 4 dozens		56
Number purchasing no eggs		107
Inedible eggs purchased during summer months		
Number purchasing none (inedibles)		173
Number purchasing inedibles which range from 2 percent to 25 percent		107
Would better quality of eggs increase consumption?		
Yes		115.0
No		185.0
Place of storage: used by consumers		
Refrigerator		225.0
Other than refrigerator		73.0
Frequency of purchasing eggs		
Weekly		149.3
Bi-weekly		32.3
None		107.0
More than twice weekly		11.4
	Total	300.0
Methods of consumption		
Table use		201.0
Cooking		99.0
	Total	300.0
Extent to which Pure Food Law guided families		
Conscious of decomposed eggs		129.7
Filthy eggs		54.4
Addled eggs		38.8
Yolk stuck to shell		1.7
Others		75.3
	Total	299.9

Table 3 (cont.)

Purchasing practices	Total
Do retailers practice pure food standards in handling eggs?	
Yes	256.0
No	<u>44.0</u>
Total	300.0
Chief gripes in buying	
None	228.8
Not available at times	20.2
Priced too high	41.5
Lack of funds	<u>9.4</u>
Total	299.9

### Summary and Conclusions

In order to ascertain the prevailing practices of the consumers respecting the basis for the selection of eggs for table use and cooking purposes, 12 questions were asked. The approach utilized in securing information was by direct questioning, but where advisable they were arrived at through casual discussion. For the purpose of this study, an interpretation of the findings of each of the 12 answers was tabulated separately by communities. Table 3 is a consolidated statistical tabulation on the 12 questions for the 10 communities.

As pointed out in the introduction to this section, all phases applicable for this particular research effort were included in the questionnaire. The questions asked are in the Appendix.

The object was to secure information upon which a program of improvement in the selection and use of good eggs would have a basis of organization for instructional purposes. The strong and weak points in the triple approach revealed a definite problem or problems for instruction in the use or place of eggs in the diet.

It was also further revealed in this study that 174 eggs were purchased per week by 30 consumer families which had a total membership of 1140 persons, 208 of whom were children under five years of age. This distribution reflects a ratio of approximately one to forty-nine, that is, one egg was purchased for every seven persons per week, or it may be expressed as one forty-ninth of an egg per person per day. There was also shown that one egg out of every 21 purchased was inedible.

Increased consumption was indicated by 31.1 percent of consum-

er families if they could secure better quality eggs from retailers. Seventy-six percent of consumer families had no complaints of quality eggs being offered for sale. This may be justified in view of the findings that 64 percent of them did not purchase inedible eggs because of their knowledge of egg quality or that they were also producers and consumed their own eggs, therefore had no complaints of the retailer offerings.

## ACKNOWLEDGMENTS

The writer wishes to thank those who have been of inestimable help in this study. He is grateful to the Texas State Department of Health, Austin, Texas, especially to Mr. J. F. Lakey, Director, Bureau of Food and Drugs; to Mr. M. D. Moore of the Food and Drug Administration, Federal Security Agency, Washington, D. C.; and to Professor L. F. Payne, Head of Department of Poultry Husbandry, Kansas State College, Manhattan, Kansas, who has been the major instructor during this study.

## LITERATURE CITED

- Knudsen, L. F., and F. L. Thomsen.  
Habits in consumption of eggs in New York City. Proc. of the world's poultry congress, pp. 395-400. 1939.
- Funk, E. M.  
The profitable utilization of soiled shell eggs. Proc. of the world's poultry congress, pp. 492-495. 1939.
- Flatt, C. A.  
The marketing of eggs in England and Wales. Proc. of the world's poultry congress, pp. 328-330. 1939.
- Cray, Raymond E.  
Retailing government graded eggs in Ohio. Proc. of the world's poultry congress, pp. 357-360. 1939.
- Stevens, Harold F.  
Survey of poultry and eggs marketing in Richland county. Agri. Ext. Ser. Ohio Univ., Columbus, Ohio. pp. 1-25. 1947.
- Funk, E. M.  
Wash eggs the right way. U. S. egg and poultry mag. pp. 10-11. May, 1948.
- Dankers, W. H.  
Lack of uniformity in egg grades at the producer and consumer levels. Agri. Ext. Service Univ. of Minn., St. Paul, Minnesota. pp. 1-3. 1948.

## APPENDIX

The following questions were used in obtaining the information presented in this thesis.

## I. Questions for Producer Group

1. How many hens and pullets of laying age did you have January 1, 1947? \_\_\_\_\_
2. Do you provide range, or keep hens confined to the laying house? \_\_\_\_\_
3. How often do you clean your house and nests? \_\_\_\_\_
4. What do you use for disinfectant? \_\_\_\_\_
5. What is the ratio of the number of nests to the number of hens? \_\_\_\_\_
  - a. How many nests do you have? \_\_\_\_\_
 

This gives a hen to nest ration of \_\_\_\_\_
6. Do you separate the hens in production from the other flock for feeding purposes? \_\_\_\_\_
7. Are separate breeding pens provided for high-producing hens? \_\_\_\_\_
8. How often are eggs gathered? \_\_\_\_\_
 

Where are eggs stored until used or sold? \_\_\_\_\_

How often are eggs marketed? \_\_\_\_\_

  - a. What do you use for litter in nests? \_\_\_\_\_
  - b. What kind of litter do you use on floors? \_\_\_\_\_
 

How often is litter renewed? \_\_\_\_\_
9. What is the average daily production of your flock?
10. Do you use self-feeders? \_\_\_\_\_
11. What home-grown feeds constitute a part of your ration? \_\_\_\_\_
12. How frequently do you worm your laying flock? \_\_\_\_\_

## II. Questions for Retailer Group

1. From what sources do you secure your market eggs? \_\_\_\_\_
2. What is the volume of eggs handled per week? \_\_\_\_\_
3. How do you care for eggs while holding for retail purposes? \_\_\_\_\_
4. Do you sell cold storage eggs? \_\_\_\_\_
5. Are dirty and clean eggs separated before they are sold? \_\_\_\_\_
6. Do you candle eggs during summer months before selling? \_\_\_\_\_
7. Are eggs graded according to quality, size and cleanliness? \_\_\_\_\_
8. From your experience in handling eggs, what changes would you recommend? \_\_\_\_\_
9. What regional market quotations do you follow in selling eggs? \_\_\_\_\_
10. Do you cater to your competitor in prices or do you set your price? \_\_\_\_\_
11. What is the usual spread in buying and selling prices? Does this spread vary for the different seasons of the year? \_\_\_\_\_
12. What suggestions can you offer to improve the marketing of eggs? \_\_\_\_\_
13. What policy do you follow in purchasing eggs from the producer, do you buy "case run", or on graded basis and pay cash or trade merchandise? \_\_\_\_\_
14. Do you base your price upon grade, quality, cleanliness or color? \_\_\_\_\_
15. Do you pay more for white or brown eggs? \_\_\_\_\_
16. What are your chief gripes in handling eggs? \_\_\_\_\_

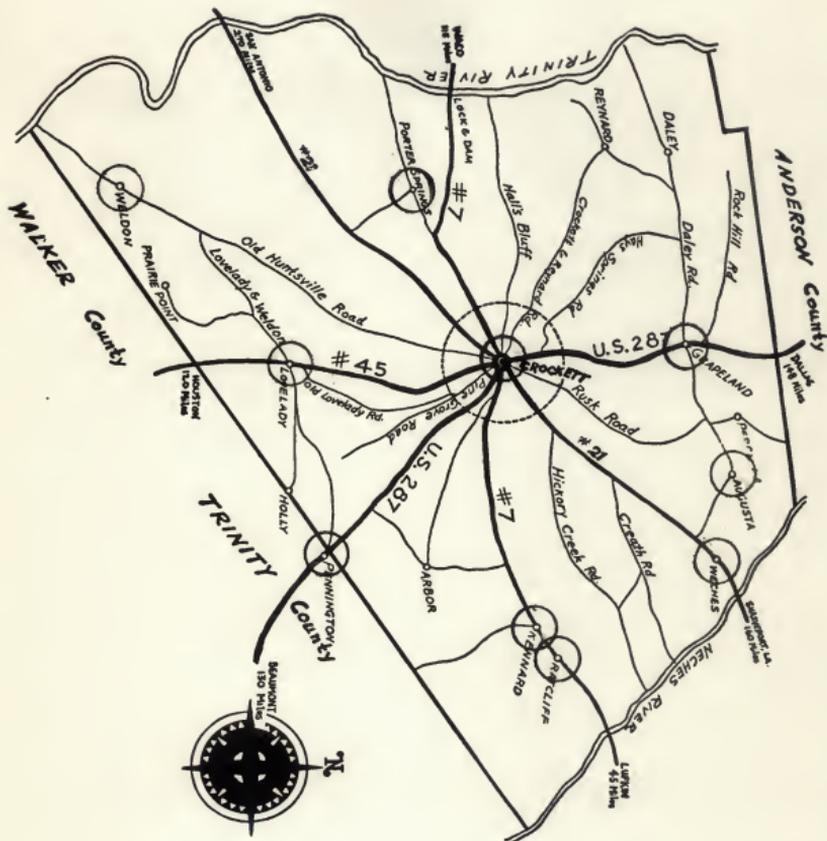
## III. Questions for Consumer Group

1. Race \_\_\_\_\_ Income group \_\_\_\_\_
2. Number in family \_\_\_\_\_ Number under five years of age \_\_\_\_\_
3. Where do you purchase your eggs? \_\_\_\_\_
4. How many eggs did you buy last week? \_\_\_\_\_

5. What proportion are inedible during the summer months, June-September? \_\_\_\_\_
6. Would consumption be increased if eggs were of a better quality? \_\_\_\_\_
7. Where do you keep the eggs after you purchase them? \_\_\_\_\_
8. How often do you buy eggs? \_\_\_\_\_
9. How are most of the eggs consumed for table use or in cooking? \_\_\_\_\_
10. To what extent does the Pure Food Law guide you in purchasing eggs? \_\_\_\_\_
11. Does evidence show that the Pure Food Standards are practiced by the retailers in handling market eggs? \_\_\_\_\_
12. What are your chief gripes in supplying your family with eggs? \_\_\_\_\_

Courtesy of  
CHAMBER OF COMMERCE  
Crockett, Texas

Map Of Houston County  
Texas



Points indicated by circles are the centers in the Crockett Trade Territory where retailers were located from whom information was received in making this study. Producers and consumers lived in or/and near these trade centers.

