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PROCESSING, GRADING AND SALE OF UTAH TURKEYS 1947-48

by

Paul R. Grimshaw

A thesis submitted in partial fulfillment
of the requirements for the degree

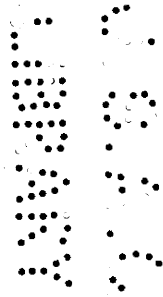
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MASTER OF SCIENCE

in

Agricultural Economics

1948



UTAH STATE AGRICULTURAL COLLEGE
Logan, Utah

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Paul R. Grimshaw

Logan, Utah
July 3, 1948

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SUMMARY

The turkey industry in Utah has grown rapidly since the depression years of the thirties. In 1945 production reached a peak of 2,109,000 birds and has decreased somewhat since then because of the end of the war and a less favorable turkey-feed price ratio. An analysis of the county production shows that the counties which have produced a large number of birds in the past have tended to increase production while counties producing fewer birds in the past have tended to cease production entirely. This trend indicates more specialization in the industry.

The average size of flock in Utah has increased considerably since 1929 and in 1947-48 was between 3,001 and 3,500. There was a wide range in size of flock varying from flocks of a few birds to flocks of about 18,000 birds. On the basis of numbers, hen turkeys made up 51 percent of the state production while tom turkeys made up 49 percent. On the basis of weight, hen turkeys made up only 38 percent while tom turkeys made up 62 percent of the state production in 1947-48.

The growth of turkey processing plants in the state has been parallel to the development of the turkey industry itself. In 1947-48, 15 plants operated in the state. Two of these 15 plants operated for the first time in 1947-48 while the other 13 plants have operated for at least two years. The processing plants tend to be concentrated in the areas of highest production.

The processing of turkeys in Utah is highly seasonal. In the 10 day period November 11 to 20 about one-fifth of the total number of birds were processed; more than 90 percent were processed in the three months October, November and December.

The processing charges ranged from 3.0 cents to 3.3 cents per pound among the plants studied. The base for making hauling charges varied widely among plants; however, a charge of 15 cents per mile with a minimum of \$7.50 per load was the most common.

A relationship was found between the weight and grade of both hen and tom turkeys. Prime hen turkeys averaged 1.2 pounds more than choice hens and choice hens 1.0 pounds more than commercial hens. Prime toms averaged 1.9 pounds more than choice toms, while the average weight of choice toms was 2.7 pounds more than commercial toms.

There was considerable variation in the weight of all grades of hen and tom turkeys and the variation in weight increased as the grade changed from prime to commercial. About 79 percent of the hen turkeys graded prime, while only 64 percent of the tom turkeys were of this grade.

There was a wide variation among plants in the percent of hen and tom turkeys of various grades. The percent of hen turkeys grading prime ranged from 90 percent in the highest plant to 66 percent in the lowest plant and averaged about 79 percent for all plants. The percent of tom turkeys grading prime ranged from about 80 percent in the highest plant to about 50 percent in the lowest plant and averaged about 64 percent. The wide variations in grade between plants shows a need for further study to actually determine the causes for such variation.

An analysis of the shipments of turkey shows that nearly 42 percent of the total weight of turkey raised in Utah was initially shipped to Ogden and Salt Lake City. Approximately 33 percent of the turkeys marketed from Utah were consigned to Boston, New York City, Omaha, and Chicago.

There were 5 buyers of turkey in Utah who bought 70 percent of the total turkey produced in the state. The largest buyer bought about 23 percent. There were eleven buyers who bought turkey from the processing plants of the state.

There was considerable variation in the prices received by producers for turkey in 1947-48. Prices of turkeys advanced about six cents per pound for all grades from the beginning to the end of the processing season. An analysis of prices received by date period shows that the period in which most turkeys were marketed was the period in which prices were the lowest. The range of prices in the 10 day periods was great and amounted to about 8 cents per pound within each period. Turkeys grading choice ranged from 2 to 3 cents lower in price than those grading prime, while commercial turkeys varied from 5 to 7 cents below the price of prime birds. Tom turkeys averaged between 8 and 10 cents per pound less than hen turkeys of the same grade. This price spread between hen and tom turkeys is one of the major problems facing the industry.

THE PROCESSING, GRADING AND SALE OF UTAH TURKEYS, 1947-48

INTRODUCTION

Turkey production in Utah is one of the most important farm enterprises of the state. In 1945, 11.5 percent of the total farm cash income of the state was from the turkey enterprise. In 1946, 9.4 percent came from this source. Turkey production made up 8.9 percent of the total cash income from farm enterprises in 1944; 5.8 percent in 1943; 4.9 percent in 1940; 1.7 percent in 1935; and 1.3 percent in 1930. 1/

It is evident after comparing the number of turkeys produced and the number of growers producing turkeys that production is becoming more specialized. In 1929 there were 228,000 turkeys raised in Utah by 3,897 growers as compared to 812,000 in 1939 by 1,212 growers. 2/ In 1944 the trend continued and there were 1,541,000 turkeys raised by 1,092 growers. 3/ In 1947, 1,112,000 turkeys were processed in Utah by 327 growers according to data obtained by this study.

The varieties of turkeys most generally raised are Bronze, White Holland, Narragansett, Black and Bourbon Red. The producers in Utah have produced a variety of the Bronze, known as the Broad Breasted Bronze, almost exclusively. The Broad Breasted Bronze bird is characterized by a long, broad breast which has much capacity for fine white meat. It is a very heavy variety which has been bred for weight and eye appeal.

1/ U. S. Department of Agriculture. Cash Receipts from Farming by States and Commodities. 1924-46. pp. 143-45.

2/ U. S. Census of Agriculture. Vol. I. part 6. Mountain and Pacific States.

3/ U. S. Census of Agriculture. Vol. I. part 31. Utah and Nevada. 1945. 152 pp.

OBJECTIVES OF THE STUDY

The objectives of this study were: (1) to ascertain charges for processing and hauling turkeys from the farm to the processing plants; (2) to determine the average and variation in size and grade of hen and tom turkeys processed by grower and plant; (3) to ascertain where Utah turkeys were marketed in 1947-48 and (4) to determine the average and variation in prices received by Utah growers for turkeys in 1947-48.

REVIEW OF LITERATURE

There has been no specific study made of marketing turkeys in Utah; however, a study was made by Dee A. Broadbent, W. Preston Thomas, and George T. Blanch, (1942), entitled "An Economic Analysis of Turkey Production in Utah." This study was in the main a cost of production study and gives suggestions for probable improvements that could be made in the production field. 4/

A study of marketing turkeys in Maryland was made by Poffenberger and De Vault in 1939. This study gives the various methods of marketing Maryland turkeys; however, the present marketing conditions in Utah are so different from Maryland conditions that it is difficult to relate data on marketing problems encountered there with those of Utah. 5/

A study was made by Tinley and Voorhies (1937), at the University of California in which some of the methods of marketing the California

4/ Broadbent, Dee A., Thomas, W. Preston, Blanch, George T., An Economic Analysis of Turkey Production in Utah. Utah Agricultural Experiment Station Bulletin 318. May 1945. 47 pp.

5/ Poffenberger, P. R., and De Vault, S. H., Marketing Maryland Turkeys. The University of Maryland Agricultural Experiment Station Bulletin 429. August 1939. 32 pp.

turkey crop were discussed. Most turkeys in California were not dressed for shipment, but were sold either directly to wholesale or retail distributors or jobbers who took the turkeys from the farm either dressed or live weight. This study, like the Maryland study, was based on circumstances so different from those in Utah that very little comparison is possible. 6/

A study of Washington's turkey industry was made by Berryman and Buchanan in 1942. This study had one section on the marketing of Washington's turkeys. The methods of sale were described as (1) co-operative sales, (2) sales to local buyers, and (3) direct sales to consumers. 7/

Gline (1939) published a bulletin entitled "Turkeys: Production, Marketing, Diseases." The section on marketing discussed to some extent proper methods of killing, grading, preparing for storage, and packaging for sale; however, very little of the information presented is related directly to this study. 8/

SOURCES OF DATA

The data presented in this study were obtained from the records of all turkey processing plants of the state except one. This plant changed management at the end of the processing year and the detailed

6/ Tinley, J. M. and Voornies, E. C., Economic Problems Affecting Turkey Marketing in California. Contribution from the Giannini Foundation of Agricultural Economics, University of California, Berkeley, California. Bulletin No. 612. August 1937. 78 pp.

7/ Berryman, Carl N. and Buchanan, Mark T., An Economic Study of Washington's Turkey Industry in 1942. Washington Agricultural Experiment Station Bulletin 453. November 1944. 42 pp.

8/ Gline, L. E., Turkeys: Production, Marketing, Diseases. Agricultural Extension Service, University of Nevada, Bulletin 86. January 1939. 182 pp.

records were not made available to the new management. All other plants cooperated very well and records were obtained on each producer who processed turkeys during the 1947-48 processing year. Data were obtained from nearly 100 percent of the commercial turkey producers in the state. Each plant was visited by an enumerator and the information obtained was transferred from the processing records of the individual producer to the sorting cards which were used for tabulations. There were two sorting cards, one entitled "Grower Card" and one entitled "Car Card." The grower card information was taken from the grower manifest. Each grower's name; address; date of processing; and number and weight of prime, choice, commercial, and other turkeys was entered on the card with the total number and weight of birds in all grades. The data on the car card was taken from the rail car or truck manifest. Each car lot or truck lot was entered on the card with the car number or truck license number, destination of the car or truck, date of shipment, buyer, and number and weight of prime, choice, commercial and other turkeys shipped in the car or truck.

The survey was conducted between January 15 and March 15, 1948. The time was chosen to correspond with the end of the 1947-48 processing year.

Data on prices were not obtainable from the processing plant records; therefore, a questionnaire was sent to the growers by mail in order to obtain prices. The returns of the first questionnaire, which was followed by a card reminder, amounted to about 20 percent of the total growers. Because of the limited return, an enumerator visited many of the growers who had not reported by mail. A sample

of about 42 percent of the total number of growers processing turkeys at processing plants was obtained by mail questionnaire or personal interview. Data on prices were obtained between April 1 and June 1, 1948.

In order to get a historical picture of the growth of the processing plants data were obtained from the grading certificates filed at the State Department of Agriculture. The figures were compiled by plants for the years 1940 to 1947.

TURKEY PRODUCTION IN UTAH

Trend of Past Years

Turkey production in the state of Utah has increased rapidly since the depression years of the thirties, table 1. Peak production

Table 1. Number of turkeys raised in Utah for selected years

Year	Total number raised (thousand head)	Percent change from previous quoted year	Index 1937-41 = 100
1929	228 <u>1/</u>	- - -	30.9
1939	812 <u>1/</u>	256.2	109.9
1937-41 avg.	739 <u>2/</u>	-9.0	100.0
1940-44 avg.	1,233 <u>3/</u>	66.8	166.6
1945	2,109 <u>2/</u>	71.7	285.4
1946	1,466 <u>3/</u>	-29.5	201.1
1947	1,112 <u>4/</u>	-25.1	150.5

1/ U. S. Census of Agriculture. Vol. 1. part 6. Mountain and Pacific States. 1940. pp. 451.

2/ Statistical Abstracts of the U. S. 1946. pp. 651.

3/ Statistical Abstracts of the U. S. 1947. pp. 695.

4/ Obtained from Utah processing plant records and includes only birds raised in Utah.

was reached in 1945 when 2,109,000 turkeys were raised. Comparisons

of turkeys raised in Utah were made on the basis of the percent change from the previous year. The 1939 figure represents a 256 percent increase from the year 1929. Gradual increases followed until the 1945 peak was reached and then a decline of about 30 percent followed in 1946. In 1947 another 25 percent decline occurred.

Using the 1937-41 average as a base and computing an index for each year it was found that the 1945 year had an index of 285 compared with an index of 151 in 1947.

Turkey production in Utah declined in the years 1946 and 1947 due in part to decreased government purchases for military uses and a less favorable turkey-feed price ratio. 9/

The average turkey-feed price ratio for the United States was 9.5 for the period 1935-44. The ratio for the Mountain States area was 13.4 in 1945, compared to 11.5 for the United States as a whole. The Mountain States had one of the most advantageous ratios in the United States for the year 1945 and the 1945 ratio was the most favorable ratio in the United States for any year in which data are available. 10/ Although figures are not available on the turkey-feed price ratio for 1946 and 1947, turkey prices have changed very little and feed prices have risen about 1/3 above the 1945 prices. This made the turkey-feed price ratio less favorable to the farmer in the 1946 and 1947 years. 11/

9/ Turkey-feed price ratio is the number of pounds of ration equivalent in value at local market prices to one pound of turkey, live weight.

10/ U. S. Department of Agriculture. Agricultural Statistics. 1946. 739 pp.

11/ U. S. Department of Agriculture. Agricultural Statistics, 1946.

Turkey Production by Counties

An analysis of the trend of turkey production in Utah by county shows that the counties of high production have tended to increase the number of birds raised while the counties of low production have produced fewer birds and in some cases have ceased production entirely, table 2. Sanpete, Utah, Cache, Box Elder, Sevier, Washington,

Table 2. Number of turkeys raised by county,
Utah 1947, 1944 and 1939 1/

<u>1949</u>	<u>County</u>	<u>1947</u>	<u>1944</u>	<u>1939</u>	<u>County</u>	<u>1947</u>	<u>1944</u>	<u>1939</u>	<u>1949</u>
675239	Sanpete	339,001	399,623	209,151	Morgan	9,490	15,019	11,097	15038
207083	Utah	168,896	179,002	26,806	Uintah	6,811	32,729	13,766	12860
189247	Cache	87,124	112,448	18,902	Garfield	6,501	25,499	24,406	5696
156205	Box Elder	84,483	147,451	60,548	Rich	5,571	6,247	448	8660
68383	Sevier	80,073	155,130	69,098	Duchesne	3,920	8,328	14,131	1286
185700	Washington	68,582	71,109	95,969	Grand	3,699	353	116	330
70329	Salt Lake	66,425	98,102	78,016	Emery	1,427	4,996	10,835	73728
75019	Juab	36,309	35,039	15,416	Beaver	204	672	612	1122
58899	Davis	34,265	29,823	11,025	Kane	128	81	79	2023
32394	Iron	30,939	62,541	13,013	Tooele	- - -	5,644	9,478	848
20884	Weber	28,025	23,675	27,539	Carbon	- - -	370	698	2880
81390	Millard	18,489	33,882	22,632	Daggett	- - -	65	842	185
68550	Wayne	13,105	21,906	572	San Juan	- - -	60	10,908	260
13386	Wasatch	10,548	6,893	12	Summit	- - -	- - -	4,093	2820
16534	Piute	9,825	64,043	2,072					

1/ 1939 and 1944 totals taken from U. S. Census of Agriculture, Dept. of Commerce, Vol. 1, part 31, page 48, and 1947 figures were taken from processing plant records.

and Salt Lake counties listed in order of the number of birds produced, were the seven leading counties in Utah in turkey production in 1947.

Sanpete county produced about 30 percent of the total state production in 1947, table 3. The ten highest producing counties produced about 90 percent of the total state production.

Table 3. Number and percent each county produced of the total turkey production, Utah 1947-48 1/

County	Number produced	Percent of total	Cumulative percent	County	Number produced	Percent of total	Cumulative percent
Sanpete	339,001	30.49	30.49	Morgan	9,490	.85	97.47
Utah	168,896	15.19	45.68	Uintah	6,811	.61	98.08
Cache	87,124	7.83	53.51	Garfield	6,501	.58	98.66
Box Elder	84,483	7.61	61.12	Rich	5,571	.50	99.16
Sevier	80,073	7.20	68.32	Duchesne	3,920	.35	99.51
Washington	68,582	6.19	74.51	Grand	3,699	.33	99.84
Salt Lake	66,425	5.97	80.48	Emery	1,427	.13	99.97
Juab	36,309	3.27	83.75	Beaver	204	.02	99.99
Davis	34,265	3.08	86.83	Kane	128	.01	100.00
Iron	30,939	2.78	89.61	Tooele	---	---	---
Weber	26,025	2.34	91.95	Carbon	---	---	---
Millard	18,489	1.66	93.61	Daggett	---	---	---
Wayne	13,105	1.18	94.79	San Juan	---	---	---
Wasatch	10,548	.95	95.74	Summit	---	---	---
Piute	9,825	.88	96.62				

1/ Includes all turkeys raised in Utah in 1947.

In 1947 turkeys were produced commercially in 24 counties of the state. Five counties, according to the data from the processing plants, produced no turkeys. Each of eleven other counties of the state had production of less than one percent of the state total. These 11 counties and the 5 counties which produced no turkeys had no processing plants located in them and may have had turkeys picked on individual farms that would not be included in the totals presented. Usually such flocks would be relatively small and hauling them long distances to the nearest processing plant would be too expensive.

The distribution of the 1947 turkey crop over the state and the location of the turkey processing plants is shown in figure 1. The plants tend to be more concentrated in the areas of highest production. There were 15 plants that operated in the 1947-48 processing year.

Variations in Flock Size

Turkey production in Utah has become more and more specialized since 1929 as shown by number of turkeys per flock, table 4. In 1929

Table 4. Average number of birds per flock in Utah for selected years

Year	Number of growers	Total birds produced	Average number of birds per flock
1929 ^{1/}	3,897	228,000	59
1939 ^{1/}	1,212	812,000	670
1944 ^{2/}	1,092	1,541,000	1,411
1947 ^{3/}	327	1,112,000	3,399

^{1/} U. S. Census of Agriculture, Vol. 1, part 6. Mountain and Pacific States. 1940. pp. 451.

^{2/} U. S. Census of Agriculture, Vol. 1, part 31. Utah and Nevada. 1945. pp. 48.

^{3/} Obtained from processing plant totals.

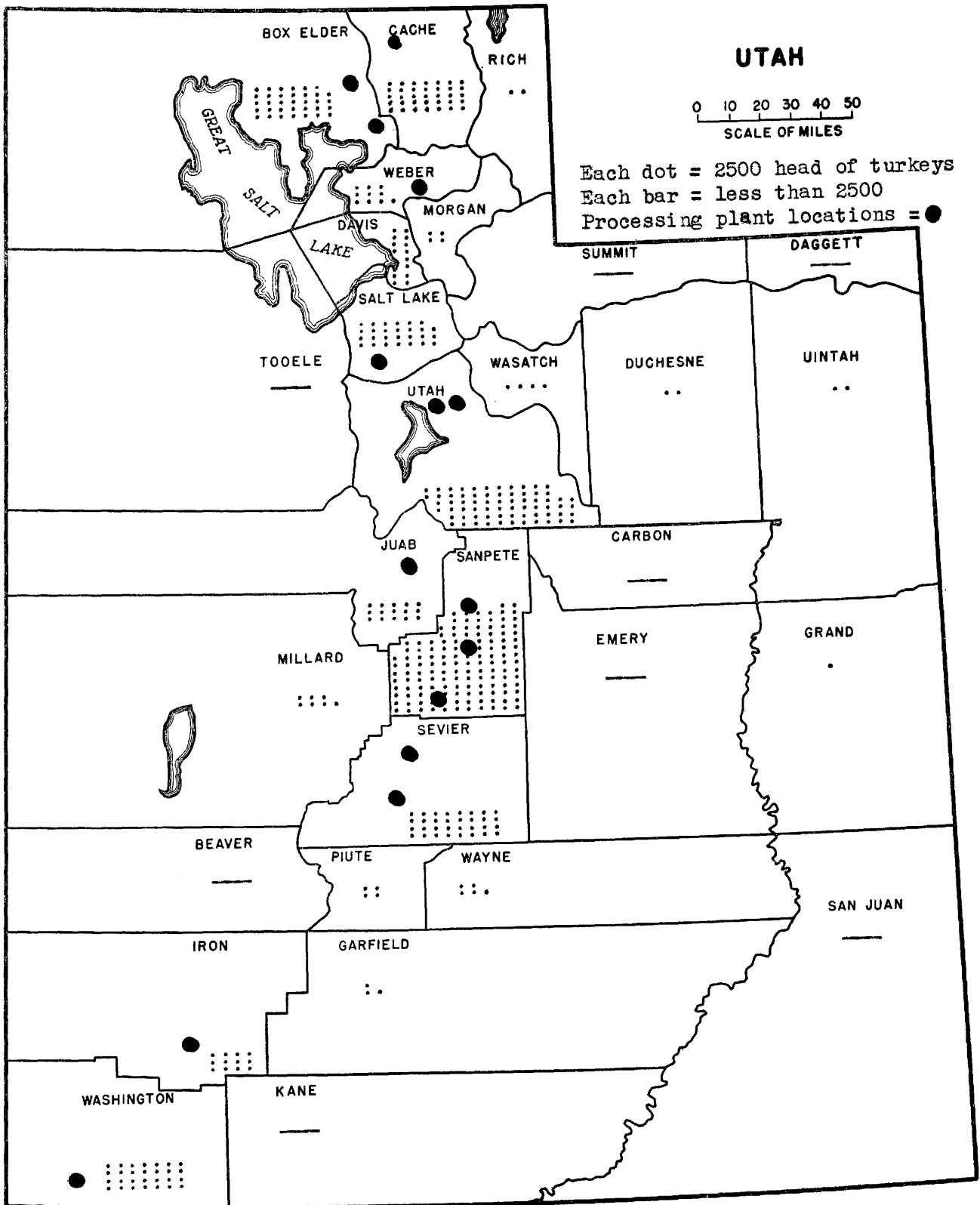


FIGURE 1. THE LOCATION OF TURKEY PRODUCTION AND TURKEY PROCESSING PLANTS IN UTAH 1947-48.

the average size of flock in the state was only 59 birds per grower. In 1944 the size of flock had increased to 1,411 birds, while in 1947 the average size of flock was 3,399 birds per grower.

Flock size in Utah in 1947-48 ranged from a few birds to about 18,000, table 5. No limit was placed on how many or how few birds

Table 5. Frequency distribution of turkeys produced and number of turkey growers relative to size of flock, Utah 1947-48 ^{1/}

<u>Number of birds per grower</u>		Number of birds	Percent of total birds	Number of growers	Percent of growers
Range	Average				
0-500	144	5,312	.49	37	11.6
501-1,000	722	12,268	1.14	16 ³	5.3 169
1,001-1,500	1,290	27,089	2.51	41 ⁴	6.6 235
1,501-2,000	1,740	55,689	5.16	93 ⁰	10.0 335
2,001-2,500	2,222	60,000	5.56	148 ⁶	8.8 423
2,501-3,000	2,758	102,037	9.45	243 ¹	11.6 539
3,001-3,500	3,257	133,534	12.36	362 ⁷	12.9 668
3,501-4,000	3,696	62,634	5.82	424 ⁹	5.3 721
4,001-4,500	4,217	50,603	4.69	471 ⁸	3.9 766
4,501-5,000	4,708	80,031	7.40	545 ⁸	5.3 813
5,001-5,500	5,248	62,972	5.83	601 ¹	3.9 852
5,501-6,000	5,695	45,556	4.22	643 ²	2.6 878
6,001-7,000	6,382	57,440	5.32	649 ⁵	2.8 906
7,001-8,000	7,554	67,986	6.30	702 ⁵	2.8 934
8,001-9,000	8,512	51,070	4.73	819 ⁸	1.8 952
9,001-10,000	9,462	47,311	4.38	853 ⁶	1.5 967
10,001-13,000	11,986	59,931	5.55	909 ¹	1.5 982
Over 13,000	16,389	98,211	9.09	102 ⁰	1.8 1000
Total		1,079,874	100.00	318	100.0

^{1/} Includes only turkeys grading prime, choice, and commercial raised in Utah 1947-48.

constituted a flock. Data were obtained on flock size for 318 growers of the state; of these, 37 growers had flocks of less than 500 birds. These 37 growers represented about 12 percent of the total growers and marketed 5,312 birds, or less than one percent of the total birds marketed.

The 41 growers who produced the greatest percent of the birds had flocks of 3,001-3,500 birds. These growers marketed about 12 percent of the turkeys of the state and represented a like proportion of the growers of the state.

Forty-eight, or about 15 percent of the total growers, had flocks larger than 5,500 birds and marketed about 40 percent of the total birds of the state.

Six growers had flocks of more than 13,000 birds. These six growers averaged about 16,000 birds each and produced about 9 percent of the total birds marketed in the state.

Number and Weight of Hen and Tom Turkeys

Data were obtained on turkeys processed in Utah plants which showed that hen turkeys represented 51.3 percent, while the tom turkeys represented 48.7 percent of the total number, table 6. A few growers in the state raised sexed flocks of turkeys in 1947. This may account for the larger number of hen birds in the state. Compared on the basis of weight, the hen turkeys represented 38.4 percent while the tom turkeys represented 61.6 percent of the total weight of birds processed.

Table 6. Number and weight of hen and tom turkeys processed,
Utah 1947-48

	Number	Weight	Percent of total	
			Number	Weight
Hens	570,505	7,558,462	51.3	38.4
Toms	541,057	12,129,178	48.7	61.6
Total	1,111,562	19,687,640	100.0	100.0

TURKEY PROCESSING PLANTS

The processing plants in the state of Utah have developed parallel with the development of the turkey industry in the state. In 1947, 15 processing plants operated in Utah. Two of these 15 plants operated for the first time in 1947, and each of them started operations late in the season. The turkeys processed were used more or less on a trial run basis to test plant efficiency. The other 13 plants have processed turkeys for at least two years.

Growth of Plants

An analysis was made of the number of pounds of turkey processed in all plants in operation since 1940. The figures used were taken from the grading certificates of all the plants for each year since 1940. Totals of any plant which may have processed turkeys that were sold without government grading would not be included; however, most turkeys processed in plants were government graded.

The data were calculated from the grading certificates filed at the State Department of Agriculture. The figures do not represent official State Department of Agriculture figures as all tabulation

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and summarization was done by individuals outside the State Department office.

In 1945-46, the year of highest turkey production in Utah, 32,282,006 pounds of turkey were processed, an index of 305 using 1940 as a base, table 7. The 1944 and the 1946 years have indexes of 232 and 223 respectively. The 1943 and 1947 years show increases of about 70 percent more than the base period.

Table 7. Number of turkey processing plants and weight of birds processed, Utah 1940 to 1947 ^{1/}

Year	Number plants operating	Total pounds processed	Index 1940 = 100
1940	10	10,586,182	100.0
1941	10	12,985,090	122.7
1942	10	17,436,549	164.7
1943	11	18,066,994	170.9
1944	13	24,568,686	232.1
1945	13	32,282,006	304.9
1946	14	23,658,365	223.5
1947	15	17,953,424	169.6

^{1/} Taken from totals of grading certificates filed at the State Department of Agriculture.

In the period 1940 to 1947 there were 17 processing plants operated in the state. The largest number of plants operated in any one year was 15 in 1947. This is an increase of 1/3 over the number operated in 1940.

The percent each plant processed of the total weight of birds processed each year between 1940 and 1947 is shown in table 8. Each

Table 8. Percent of the total weight of turkeys processed by each plant, Utah 1940 to 1947 1/

Plant	Percent of total weight processed							
	1940	1941	1942	1943	1944	1945	1946	1947
1	---	---	6.2	8.4	6.5	5.5	5.9	6.9
2	17.5	20.8	15.7	13.9	10.6	6.6	9.9	9.9
3	---	---	---	8.8	4.5	7.0	7.5	6.9
4	---	---	---	---	---	---	---	.6
5	1.3	.6	---	---	.1	---	---	---
6	2.4	3.0	2.8	.3	2.2	1.4	1.2	---
7	---	---	---	---	---	---	---	.3
8	16.6	9.4	9.8	5.2	7.1	6.8	7.6	9.2
9	7.7	12.0	9.7	6.1	9.3	13.7	11.8	11.1
10	---	---	---	---	---	5.3	8.5	5.0
11	8.6	15.0	15.3	14.7	16.1	14.6	10.6	14.4
12	8.8	5.1	5.9	10.0	9.6	8.9	6.0	9.5
13	14.8	11.1	10.7	3.0	8.6	9.7	6.6	6.9
14	---	---	---	---	---	---	6.3	4.8
15	11.7	15.5	16.8	18.4	13.6	9.7	5.8	5.1
16	8.4	5.6	7.1	6.0	8.2	8.3	9.6	7.0
17	---	---	---	---	3.6	2.5	2.5	2.4
Other <u>2/</u>	2.2	1.9	---	.2	---	---	.4	---
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/ Taken from totals of grading certificates filed at the State Department of Agriculture.

2/ Includes turkeys processed and graded on individual farms.

plant was given a number to avoid use of plant names.

In 1941 plant 2 processed 20.8 percent of the total birds processed in the state, while in 1945 the same plant processed only 6.6 percent of the total. The weight processed in the same years by plant 2 was 2,701,000 pounds and 2,131,000 pounds respectively, or a decrease of 570,000 pounds.

Seasonality of Turkey Processing

Seasonality of turkey processing was measured by determining the number processed in each 10-day period during the processing season. Approximately 10,000 birds, or about 1 percent of the total birds, could not be classified on the basis of date period of processing because of incomplete data.

In the 31 day period, October 21 to November 20 inclusive, about 50 percent of the total number or about 550,000 birds were processed, figure 2. During this period nearly every plant in the state was processing birds at near maximum capacity. In 1947 the processing year started the latter part of August and reached a peak in the middle of November or just before Thanksgiving. There was a decrease in the rate of processing following Thanksgiving; however, a Christmas run started early in December and lasted until just before Christmas. The peak of this period was reached about December 10. During the Christmas season of 1947 all the processing plants closed and re-opened about January 5, 1948. There were 16,000 birds processed by three of the plants between January 5 and 20. This small run ended the processing year for most plants with the exception of the off-season processing of the breeder flocks.

Three plants had peak runs in the pre-Christmas season, while all other plants had their peak runs in the pre-Thanksgiving period.

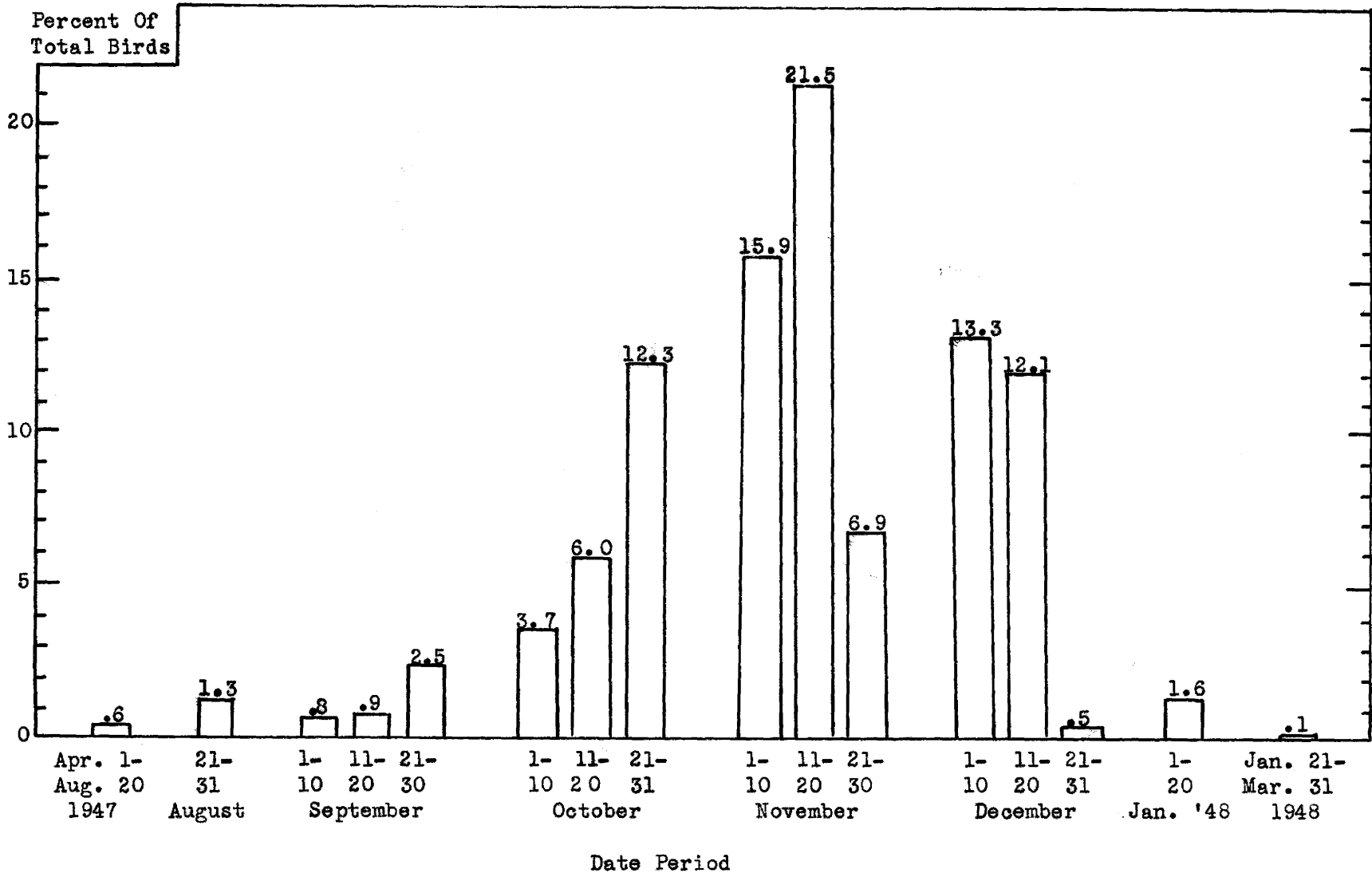


FIGURE 2. PERCENT OF THE TOTAL NUMBER OF TURKEYS PROCESSED IN EACH DATE PERIOD BY ALL PROCESSING PLANTS IN UTAH 1947-48

It should be noted that some of the processing plants operate in nearly every month of the year to take care of off-season runs on breeder hens and early flocks, and the number of birds processed in this period amounted to less than one percent of the total.

If the plants operated at capacity it would be possible to process all the birds in one and one-half months. This shows the necessity of having some alternative use for the plants in order to reduce the overhead costs. Some plants processed other poultry, some used processing rooms for grain storage, while others remained unused except for turkey processing.

Processing and Hauling Charges

Processing charges varied from 3.0 cents per pound to 3.5 cents per pound among the various plants studied, table 9. Hauling charges also varied considerably among the plants. Two plants made no additional charge for hauling. The minimum charge varied from \$7.50 to \$15.00 and the rate per mile varied from 15 to 20 cents. Plant "A" had hauling charges set up on a radius basis from the plant. All growers in one radius paid the same hauling charges.

Table 9. Charges made for processing and hauling turkeys from the farm to the plant, Utah 1947-48

Plant	Processing charge per lb. Cents	Hauling charges per load
A	3.25	\$7.50 to 25 miles; \$10 up to 50 miles; \$15 over 50 miles.
B	3.00	\$10 minimum; 15¢ per mile.
C	3.00	\$10 minimum; 15¢ per mile.
D	3.00	\$15 per load.
E	3.00	Included in processing charge.
F	3.00	\$7.50 minimum; 16¢ per mile.
G	3.50	Included in processing charge.
H	3.00	\$10 minimum; 15¢ per mile.
I	3.50	\$10 minimum; 15¢ per mile.
J	3.00	\$7.50 minimum; 16¢ per mile.
K	3.50	\$7.50 minimum; 16¢ per mile.
L	3.00	\$9.00 minimum; 15¢ per mile.
M	3.00	\$7.50 minimum; 20¢ per mile.

SIZE AND GRADE OF TURKEYS MARKETING

Size and grade was determined for each lot of turkeys processed by each grower in 1947-48. From these data it was possible to determine average and variations in size and grade by each lot processed. Weights and grades were not available for individual birds.

Distribution by Grade

The percent by weight of turkeys grading prime, choice or commercial varied considerably from 1940 to 1947, table 10. In 1942, the low year of those reported, 61.2 percent of the total weight of birds processed graded prime, compared with 73.1 percent in 1944. In recent years about 70 percent of the turkeys by weight graded prime, about 25 percent graded choice, and 5 percent graded commercial.

Table 10. Proportion of total weight of Utah turkeys grading prime, choice, and commercial for selected years.

Grade	Percent of total weight							1948	1949
	1940	1941	1942	1943	1944	1946	1947		
Prime	62.2	66.5	61.2	68.5	73.1	69.5	72.1	69.1	76.2
Choice	33.2	29.9	33.9	26.5	23.2	25.3	23.5	26.1	24.5
Com'l	4.6	3.6	4.9	5.0	3.7	5.2	4.4	4.8	5.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

About 79 percent of all hens marketed in 1947-48 graded prime, 19 percent of the hens graded choice, and less than three percent graded commercial, table 11. About 64 percent of the total number of toms graded prime, 23 percent graded choice, and 7 percent graded commercial.

Although a larger proportion of hens graded prime than was true of toms the hens were enough smaller that the distribution of numbers by grade was almost identical to the distribution of weight by grade.

Table 11. Number and percent of hen and tom turkeys grading prime, choice and commercial, Utah 1947-48 1/

Grade	Number			Percent of total		
	Hens	Toms	Total	Hens	Toms	Total
Prime	443,358	344,939	788,297	78.8	64.4	71.8
Choice	105,022	152,225	257,247	18.7	28.4	23.4
Com'l	14,530	38,598	53,128	2.5	7.2	4.8
Total	562,910	535,762	1,098,672	100.0	100.0	100.0

1/ Includes all prime, choice and commercial turkeys processed in Utah in 1947-48 except 12,909 birds of a different size and breed.

Relation of Size to Grade

There was a direct relationship between the grade and size of both hen and tom turkeys for all plants studied, table 12. The average weight of prime hens for all plants was 13.6, the average weight of choice hens was 12.4, a difference of 1.2 pounds. The commercial hens averaged 1 pound less than the choice hens. The average weight of the prime toms was 23.2, while the average of the choice toms was 21.3, a difference of 1.9 pounds. The average weight of the commercial toms was 18.6 or 2.7 pounds less than the weight of choice toms. The relationship between grade and weight was consistent for both hen and tom turkeys in all plants with a very few exceptions. The average weight of turkeys within the same grade varied considerably among the various plants.

Table 12. Average weight of hen and tom turkeys by plant relative to grade, Utah 1947-48

Plant	HENS			TOMS		
	Prime	Choice	Com'l	Prime	Choice	Com'l
A	13.4	12.8	12.0	22.7	20.4	17.2
B	13.3	12.4	11.9	23.2	20.4	17.7
C	13.2	12.7	12.1	23.8	20.8	17.7
D	14.7	13.8	12.8	24.4	22.5	19.5
E	13.2	8.7	9.5	23.2	20.6	19.2
F	13.3	12.5	11.8	20.7	20.9	18.8
G	13.1	12.3	11.0	22.7	20.9	18.2
H	14.4	13.2	12.3	24.7	23.0	19.9
I	13.7	12.8	11.2	23.7	20.6	18.6
J	13.9	13.3	11.9	24.6	22.8	19.8
K	13.4	12.2	10.6	21.4	20.4	20.4
L	13.4	12.6	9.9	23.4	21.6	17.6
M	13.7	11.9	11.1	23.1	21.5	17.7
Average	13.6	12.4	11.4	23.2	21.3	18.6

The weight of turkeys was an important factor in determination of grade, table 13. The modal weight range for prime hens was between 13.0 and 13.9 pounds. About 50 percent of the prime hens fall in this range. About 95 percent of the total prime hens fall in the weight range between 12.0 and 14.9 pounds, a 3 pound variation. The modal range for choice hens was between 12.0 and 12.9 and about 90 percent were within the 3 pound range 11.0 to 13.9. About 82 percent of the commercial hens were in the 3 pound weight

Table 13. Distribution of hen turkeys relative to weight and grade, Utah 1947-48 ^{1/}

Weight range	HENS					
	Number			Percent of total		
	Prime	Choice	Com'l	Prime	Choice	Com'l
Less than 8	561	- - -	29	.13	- - -	.20
8.0-8.9	218	91	187	.05	.09	1.29
9.0-9.9	32	62	489	.01	.06	3.37
10.0-10.9	574	916	4,362	.13	.87	30.02
11.0-11.9	4,837	13,363	3,912	1.09	12.72	26.92
12.0-12.9	92,289	45,402	3,639	20.82	43.23	25.04
13.0-13.9	226,036	35,954	1,540	50.97	34.24	10.60
14.0-14.9	104,446	8,292	241	23.55	7.89	1.66
15.0-15.9	9,168	940	117	2.08	.90	.80
16 and more	5,197	2	14	1.17	- - -	.10
Total	443,358	105,022	14,530	100.00	100.00	100.00

^{1/} 7,593 hens of a lighter breed were omitted.

range 10.0 to 12.9. The variation in weight increased as the grade varied from prime to commercial.

The variation in the weight range of tom turkeys was much greater than for hen turkeys of the same grade, table 14. About 75 percent of the total number in each grade were within a 4 pound interval, although there was a tendency for variation to increase as grade varied from prime to commercial as was true with hens.

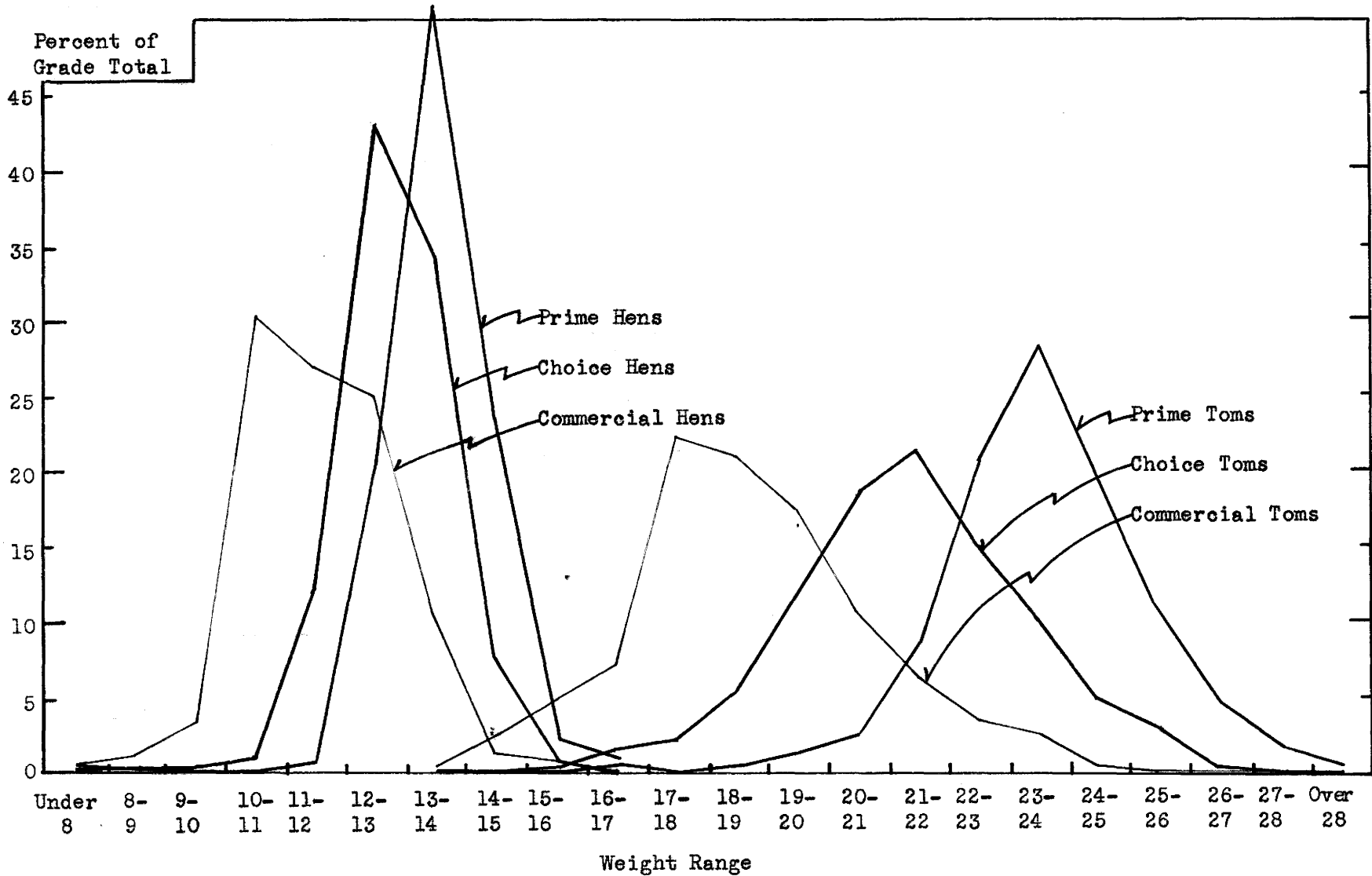
Data from tables 13 and 14 are presented graphically in figure 3. The variation in weight is shown in the graph by comparing the three grades of hens or toms to each other and by comparing

Table 14. Distribution of tom turkeys relative to weight and grade, Utah 1947-48 ^{1/}

Weight range	TOMS					
	Number			Percent of total		
	Prime	Choice	Com'l	Prime	Choice	Com'l
Less than 14	---	---	164	---	---	.42
14.0-14.9	---	---	995	---	---	2.57
15.0-15.9	---	177	1,854	---	.12	4.80
16.0-16.9	2,015	2,423	2,731	.58	1.59	7.08
17.0-17.9	190	3,407	6,552	.06	2.24	22.17
18.0-18.9	1,087	6,630	8,193	.32	5.67	21.23
19.0-19.9	4,388	24,717	6,840	1.27	16.24	17.72
20.0-20.9	8,565	28,094	4,074	2.48	18.45	10.56
21.0-21.9	29,058	32,661	2,419	8.42	21.46	6.27
22.0-22.9	69,996	22,995	1,428	20.29	15.11	3.70
23.0-23.9	97,427	15,423	1,040	26.24	10.13	2.69
24.0-24.9	67,204	7,798	245	19.48	5.12	.63
25.0-25.9	39,905	4,880	63	11.57	3.20	.16
26.0-26.9	16,492	780	---	4.78	.51	---
27.0-27.9	6,398	236	---	1.86	.16	---
28 and more	2,214	4	---	.65	---	---
Total	344,939	152,225	36,598	100.00	100.00	100.00

^{1/} 5,295 toms of a lighter breed were omitted.

the hens to the tom turkeys within a grade. A high, narrow line shows little variation, while a wide relatively low line shows more variation. These data indicate that it is difficult to get a hen to grade prime unless it weighs more than 12 pounds. Few tom turkeys weighing less than 20 pounds graded prime.



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FIGURE 3. DISTRIBUTION OF HEN AND TOM TURKEYS RELATIVE TO WEIGHT AND GRADE, UTAH, 1947-48

Variation in Grade by Plant

There was considerable variation in the proportion of birds of various grades among the plants studied, table 15. The percent of prime hens ranged from about 90 in plant "D" to about 66 percent in

Table 15. Percent of hen turkeys grading prime, choice and commercial by plant, Utah 1947-48

Plant	Number of hens processed	Percent of hens grading			
		Prime	Choice	Com'l	Total
D	2,083	90.2	7.5	2.3	100
B	55,285	88.1	9.8	2.1	100
F	74,261	86.3	10.6	2.9	100
E	36,281	85.4	12.8	1.8	100
K	37,437	83.6	13.0	3.4	100
L	28,802	80.4	17.4	2.2	100
J	59,739	77.7	19.7	2.6	100
G	42,232	77.4	20.3	2.3	100
C	50,400	76.1	21.5	2.4	100
H	69,211	75.3	23.2	1.5	100
M	38,249	73.3	24.1	2.6	100
I	45,279	70.1	25.0	4.9	100
A	35,359	65.9	31.5	2.6	100
Average	44,201	78.8	18.6	2.6	100

plant "A" and averaged about 79 percent for all plants. This difference in proportion of various grades by plant may be due to production factors such as variation in type of birds raised, age

and condition of birds when marketed, feeds used, and other management practices, different methods of processing, and variations in appraisal of birds by graders in the different plants.

There was even more variation among plants with respect to proportion of tom turkeys of various grades than was true of hen turkeys, table 16. Plant "E" had about 80 percent prime toms, while plant "A" had only 50 percent prime toms. The average for all plants was about 64 percent.

Table 16. Percent of tom turkeys grading prime, choice and commercial by plant, Utah 1947-48

Plant	Number of toms processed	Percent of toms grading			
		Prime	Choice	Com'l	Total
E	68,900	79.8	15.6	4.6	100
L	25,344	75.2	19.7	5.1	100
D	1,637	74.4	19.7	5.9	100
M	33,967	70.2	25.8	4.0	100
H	64,037	69.7	26.2	5.1	100
K	24,709	68.1	24.7	7.2	100
F	65,001	67.2	25.0	7.8	100
G	36,974	62.1	30.5	7.4	100
B	50,326	60.0	33.7	6.3	100
J	36,711	56.2	33.8	10.0	100
I	39,275	55.6	34.4	10.0	100
C	51,602	52.3	37.5	10.2	100
A	36,911	50.2	42.3	7.5	100
Average	41,184	64.4	28.6	7.0	100

The percent of choice toms varied from about 16 in the lowest plant to about 42 in the highest plant with the average for all plants being about 29 percent.

The commercial toms varied from about 4.5 percent to 10.2 percent among the various plants and averaged 7 percent, or more than 2.5 times as high as for commercial hens.

There was a tendency for plants above average in proportion of hens grading prime to be above average in proportion of toms grading prime; likewise, those plants below average in proportion of hens grading prime were below average in proportion of toms grading prime.

SALE OF UTAH TURKEYS

About 67 percent of the turkeys marketed in Utah were sold on a grade basis New York dressed to competitive buyers at the time of processing. Twenty-two percent were sold cooperatively, while ten percent of the total birds marketed were retained by the grower after processing in expectation of price increases. There were two plants which processed cooperatively but made no attempt to sell the birds for their members. Even though some cooperatives had cooperative sales outlets, many members sold their birds to independent buyers at the time of processing. Most Utah turkeys were sold through one of these three sales methods.

Utah produces more turkeys than she can utilize; therefore, the sale of turkeys outside Utah is an important source of income to the farmers of the state. Utah turkeys were shipped to nearly all the larger population centers of the United States.

Cities to Which Utah Turkeys Were Consigned

Table 17 shows the cities to which Utah turkeys were first consigned. It is important to realize that many of the original destinations would be rail terminals where further shipping would

Table 17. Distribution of turkeys from processing plants relative to initial destination, Utah 1947-48

<u>Destination</u>	<u>Pounds shipped</u>	<u>Percent of total</u>	<u>Cumulative percent</u>
Salt Lake City, Utah	5,180,889	26.49	26.49
Ogden, Utah	3,023,609	15.46	41.95
Boston, Mass.	1,908,954	9.76	51.71
New York City, N. Y.	1,814,842	9.28	60.99
Omaha, Nebraska	1,650,745	8.44	69.43
Chicago, Illinois	1,059,802	5.42	74.85
Nephi, Utah	959,919	4.91	79.76
Provo, Utah	936,979	4.79	84.55
Los Angeles, Calif.	346,940	1.77	86.32
Richfield, Utah	252,274	1.29	87.61
Fielding, Utah	214,852	1.10	88.71
Ephraim, Utah	150,532	.77	89.48
Butte, Montana	148,653	.76	90.24
Springville, Utah	134,771	.69	90.93
Unknown	622,227	3.18	94.11
All Others ^{1/}	1,149,931	5.89	100.00
Total	19,554,919	100.00	

^{1/} Includes all cities receiving less than 100,000 pounds of turkey. Includes 29 cities, 18 of which are in Utah.

actually be required to get the turkeys to the place where the consumer would buy them.

Salt Lake City and Ogden accounted for nearly 42 percent of the total pounds of turkey marketed from processing plants in the state. In addition to being consuming areas, these two cities have eviscerating facilities where many turkeys were shipped New York dressed and eviscerated before being shipped to destinations outside the state.

Grading certificates from the Salt Lake eviscerating plant show 665,896 pounds of government graded turkey were eviscerated by them in 1947. Data for the Ogden plant has not been obtained.

Salt Lake City, Ogden, Boston, New York City, Omaha, and Chicago areas received about 75 percent of the turkeys produced in the state. The other 25 percent of Utah's turkey crop was originally shipped to other cities of Utah and to Los Angeles, San Francisco, and Seattle on the West Coast.

Boston, New York City, Omaha, and Chicago received approximately 33 percent of the turkeys produced in Utah. Cars initially consigned to these markets may have been re-routed to other destinations prior to arrival if market conditions changed after initial shipment.

Cities outside Utah and west of the Rocky Mountains received about 2 percent of Utah's turkey crop, while central and eastern cities received about 33 percent. This comparison shows that most of Utah's turkeys leaving the state are at present being shipped to eastern markets.

Buyers of Utah Turkeys

In 1947-48 there were 5 buyers in Utah who each bought over one million pounds of turkey from the processing plants of the state. These 5 buyers bought about 13.5 million pounds or 70 percent of the total turkey marketed in Utah, table 18.

Buyer "A" purchased about 22 percent of the total pounds marketed or about 4.3 million pounds of turkey. Buyer "B" purchased about 15 percent or about 3 million pounds.

Table 18. Distribution of turkeys from processing plants relative to buyer, Utah 1947-48

<u>Buyer</u>	<u>Pounds purchased</u>	<u>Percent of total</u>	<u>Cumulative percent</u>
A	4,299,003	21.99	21.99
B	3,004,436	15.56	37.35
C	2,843,078	14.54	51.89
D	2,161,615	11.05	62.94
E	1,380,779	7.06	70.00
F	984,674	5.04	75.04
G	947,667	4.85	79.89
H	728,702	3.73	83.62
I	688,671	3.52	87.14
J	236,256	1.21	88.35
K	116,521	.60	88.95
Unknown	266,227	1.47	90.42
All Others <u>1/</u>	1,875,289	9.58	100.00
Total	19,554,919	100.00	

1/ Includes 51 growers whose turkeys were not sold at the time of processing.

There are 51 growers included in the "other" group who retained title to their own birds and sold at a later date to take advantage of prospective price increases.

The number of buyers purchasing turkeys from the processing plants varied from 1 in plant "I" to 7 in plant "E", table 19. The

Table 19. Number of buyers and the proportion of the turkeys purchased by the largest buyer and the three largest buyers from 12 processing plants, Utah 1947-48 1/

Plant	Number of buyers <u>2/</u>	Percent of birds sold at processing time purchased by		Percent of birds not sold at processing time
		Largest buyer	3 largest buyers	
A	6	37.5	62.3	16.6
B	5	40.8	90.1	26.0
C	5	60.9	85.0	23.3
E	7	25.9	69.5	27.9
F	6	45.2	78.2	20.5
G	5	70.9	89.4	- - -
H	5	39.9	91.0	3.4
I	1	100.0	- - -	- - -
J	5	41.1	93.3	3.4
K	5	45.6	89.9	8.9
L	6	47.8	85.7	43.9 <u>3/</u>
M	6	63.0	88.5	6.6

1/ Plant "D" omitted because of the small volume processed.

2/ Includes cooperative sales outlets.

3/ Includes 17.3 percent for which buyer was not obtained.

largest buyer purchased all of the turkeys processed in plant "I", whereas the largest buyer purchased about one-fourth of the turkeys processed in plant "E". The proportion of turkeys purchased by the three largest buyers in each plant varied from about 70 to 93 percent.

Prices Received for Turkeys

Table 20 shows the prices received by producers for prime hen and tom turkeys in various date periods. The date periods in table 20

Table 20. Prices received for prime hen and tom turkeys relative to date of sale, Utah 1947-48

Date of sale	Prime Hens			Prime Toms		
	Number of lots sold	Price per pound Average	Range	Number of lots sold	Price per pound Average	Range
Sept. 21-30	2	48.0	46.0-50.0	1	41.0	41.0
Oct. 1-10	4	50.0	46.5-56.0	3	40.8	39.0-43.5
Oct. 11-20	12	48.9	46.0-54.0	6	40.7	38.0-44.0
Oct. 21-31	13	48.6	41.0-55.0	13	39.5	38.0-45.0
Nov. 1-10	12	47.8	40.0-50.8	15	38.4	36.0-41.0
Nov. 11-20	38	49.9	47.0-54.0	40	40.0	37.0-47.0
Nov. 21-30	8	50.9	48.0-54.0	3	42.3	39.0-48.0
Dec. 1-10	17	52.6	50.5-58.0	20	43.6	38.8-50.5
Dec. 11-20	18	53.7	48.0-58.0	18	43.1	38.5-48.0
Dec. 21-31	8	51.9	48.5-56.0	13	43.8	38.0-48.0
Jan. 1-20	3	50.8	49.0-52.0	5	43.0	40.0-46.3
Jan. 21- Mar. 31	2	54.0	53.0-55.0	3	46.5	45.0-47.5
Total	137			140		

correspond to the date period breakdown in figure 2; and, thus, give a basis for comparing turkeys processed in a particular date period with the price received by producers in the same period.

Prices were lowest from November 1-10 for both prime hens and toms and increased only a little more than 1 cent per pound in the period November 11-20. These 40 lots represent the largest group sold in any period; and, therefore, it could logically be assumed that more turkeys were sold in this period than in any other period. As previously shown in figure 2, more than 20 percent of the total turkeys were processed in the same period.

Prices rose after Thanksgiving and reached a peak for prime hens of about 54 cents per pound between December 11 and 20. The price of prime toms averaged about 44 cents per pound during the month of December. The price spread between prime hens and toms ranged between 8 and 10 cents per pound.

Table 21 shows the prices received for choice hen and tom turkeys. The trend in prices was parallel to the prices received for prime birds with peak prices being paid in the period December 11 to December 20.

The price range for certain periods was greater than the average price difference between periods, indicating considerable variation in prices received by growers on the same day. An example of this price spread is shown by observing the date period December 11-20. In this period a 10-cent price spread occurred in the prices paid producers for choice hens. An 8-to 10-cent range in prices existed for nearly every date period.

Table 21. Prices received for choice hen and tom turkeys relative to date of sale, Utah 1947-48

Date of sale	Choice Hens			Choice Toms		
	Number of lots sold	Price per pound Average	Price per pound Range	Number of lots sold	Price per pound Average	Price per pound Range
Sept. 21-30	2	45.8	43.0-48.5	1	39.0	39.0
Oct. 1-10	3	45.8	44.0-48.5	3	38.2	37.0-39.5
Oct. 11-20	12	46.8	44.0-51.0	6	38.5	36.0-41.8
Oct. 21-31	13	47.4	43.0-53.5	13	37.5	36.0-43.5
Nov. 1-10	12	45.7	38.0-48.5	15	36.4	34.0-39.0
Nov. 11-20	37	47.9	45.0-52.0	41	38.1	35.0-45.0
Nov. 21-30	8	49.1	46.0-52.0	3	39.3	37.0-43.0
Dec. 1-10	15	50.6	47.0-55.0	19	41.4	36.8-48.5
Dec. 11-20	18	51.4	46.0-56.0	18	41.8	36.5-46.0
Dec. 21-31	7	49.3	46.0-54.0	13	41.8	36.0-46.0
Jan. 1-20	3	48.3	47.0-50.0	5	40.8	38.0-44.3
Jan. 21- Mar. 31	2	52.5	52.0-53.0	2	44.3	43.0-45.5
Total	132			139		

Table 22 shows the prices received for commercial hen and tom turkeys. The trend in prices received for commercial birds was similar to the trend in prices received for prime and choice birds.

Table 22. Prices received for commercial hen and tom turkeys relative to date of sale, Utah 1947-48

Date of sale	Commercial Hens			Commercial Toms		
	Number of lots sold	Price per pound Average	Price per pound Range	Number of lots sold	Price per pound Average	Price per pound Range
Sept. 21-30	2	40.0	36.0-44.0	1	36.0	36.0
Oct. 1-10	3	41.3	39.5-44.5	3	33.5	30.0-35.5
Oct. 11-20	12	43.6	41.0-48.0	5	34.9	33.0-38.5
Oct. 21-31	12	43.7	40.0-50.0	12	33.5	30.0-40.0
Nov. 1-10	12	42.1	33.0-45.8	15	32.7	29.0-35.0
Nov. 11-20	32	43.8	39.0-49.0	37	34.1	30.0-40.0
Nov. 21-30	7	44.4	41.0-48.0	3	35.0	32.0-40.0
Dec. 1-10	12	46.0	41.0-48.5	18	37.1	31.8-43.5
Dec. 11-20	17	47.3	40.0-51.0	18	37.3	34.0-43.0
Dec. 21-31	7	45.3	43.0-49.0	13	37.4	31.0-41.0
Jan. 1-20	3	44.3	43.0-45.0	5	36.7	35.0-39.3
Jan. 21- Mar. 31	1	50.0	50.0	2	41.3	40.0-42.5
Total	120			132		

The price received for commercial hen turkeys ranged from 1 to 4 cents per pound more than the price received for prime tom turkeys. This spread occurred because of the size of the prime tom birds and not because of the quality of the meat.

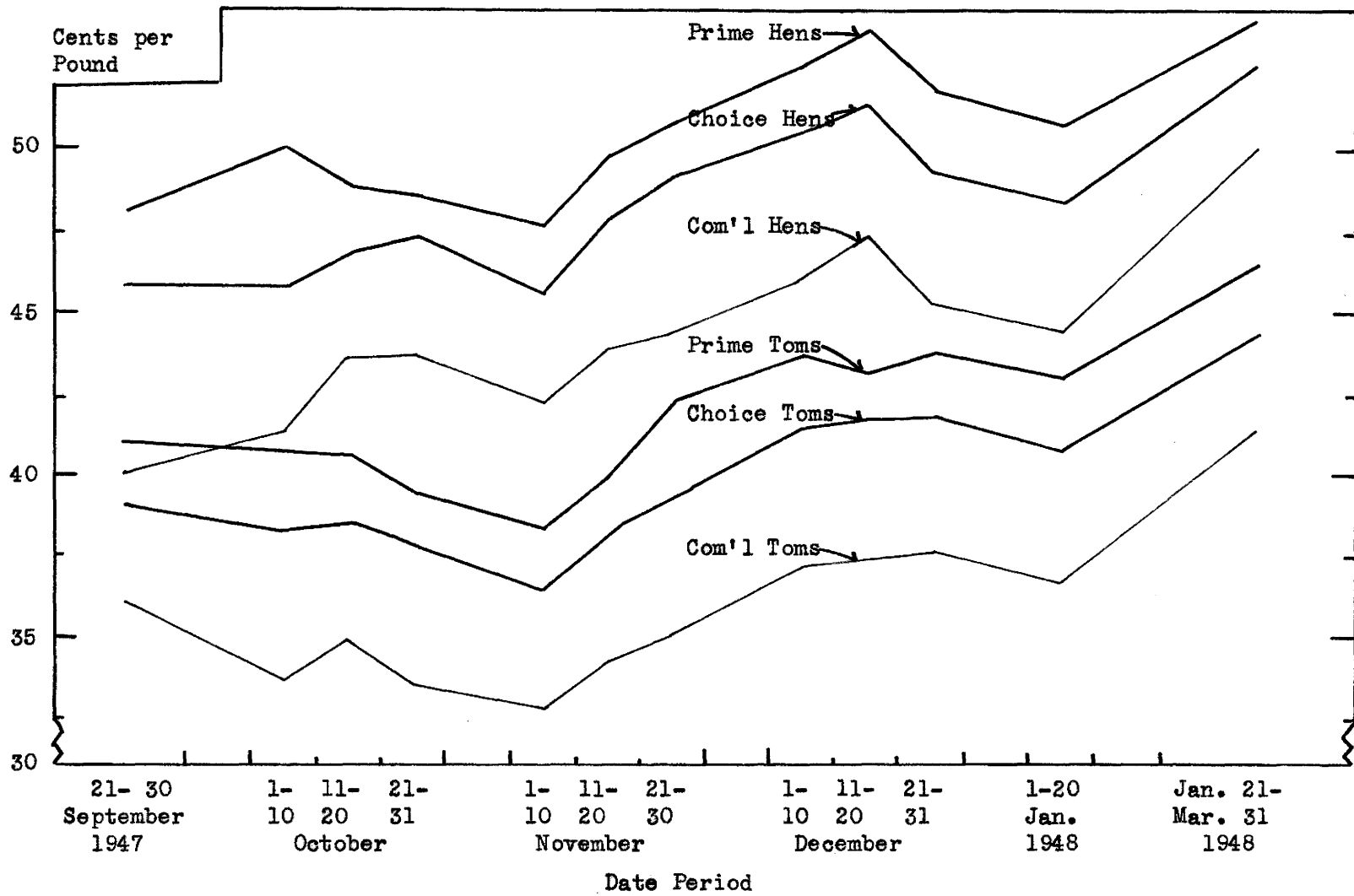


FIGURE 4. PRICES RECEIVED FOR VARIOUS GRADES OF HEN AND TOM TURKEYS RELATIVE TO DATE OF SALE, UTAH, 1947-48

Figure 4 shows a comparison between prices received for the various grades of hen and tom turkeys. All grades follow a similar pattern.

The price received for choice hens varied from 2 to 3 cents below the price received for prime hens, while the price received for commercial hens varied from 5 to 7 cents less than the price of prime hens. Choice toms ranged from 2 to 3 cents lower in price than prime toms, while commercial toms ranged from 5 to 7 cents below the price of prime toms.

The price received for prime toms was about 8 to 10 cents per pound below the price received for prime hens. This price spread is one of the major problems the turkey producers have to face at the present time. The 8-to 10-cent margin was paid for small birds because the small bird was demanded by the consumer while the large toms, of equal quality, were discriminated against because of their size.

There was a general upward trend in prices received for turkeys during 1947-48. The producers who marketed their birds early in the processing season received on an average 6 cents less per pound for all grades of birds marketed than those producers who marketed their birds in December.

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