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UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF AGRICULTURAL ECONOMICS  
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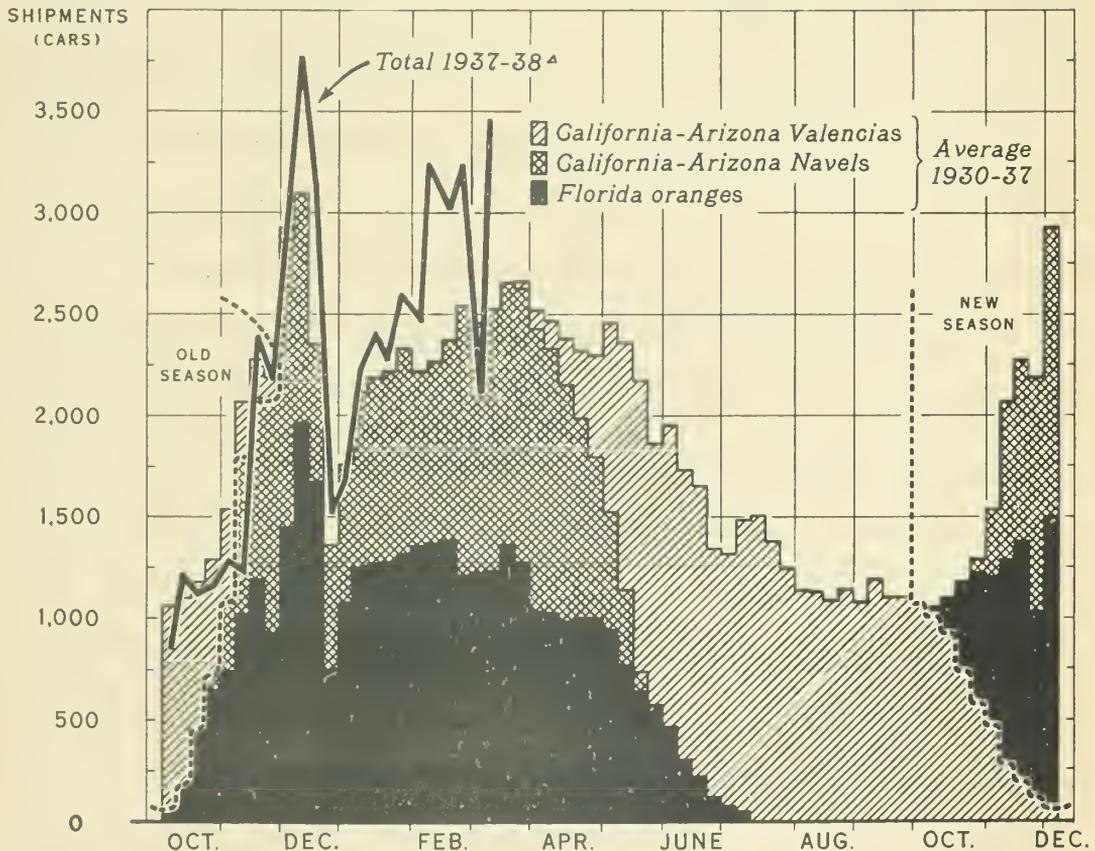
MARCH 23 1938

THE FRUIT SITUATION

APR 2 1938

U. S. Department of Agriculture

SHIPMENTS OF ORANGES FROM PRINCIPAL PRODUCING AREAS, AVERAGE 1930-31 TO 1936-37, AND 1937-38\*



\* RAIL, BOAT, AND INTERSTATE TRUCK SHIPMENTS

<sup>a</sup> TOTAL EXCLUDES SHIPMENTS FROM TEXAS, ALABAMA, MISSISSIPPI, AND LOUISIANA

U. S. DEPARTMENT OF AGRICULTURE

NEG. 34165

BUREAU OF AGRICULTURAL ECONOMICS

THE MARKETING SEASON FOR ORANGES GROWN FROM THE BLOOM OF A GIVEN YEAR USUALLY EXTENDS OVER A PERIOD OF APPROXIMATELY 15 MONTHS. NEW CROP ORANGES FROM FLORIDA START COMING TO MARKET IN OCTOBER WHILE OLD CROP CALIFORNIA VALENCIAS ARE STILL MOVING IN CONSIDERABLE VOLUME. NEW CROP CALIFORNIA NAVELS BEGIN TO MOVE IN NOVEMBER, AND DURING THE WINTER AND SPRING THEY AND FLORIDA ORANGES CONSTITUTE ALMOST THE ENTIRE MARKETINGS. THE CALIFORNIA NAVAL SEASON ENDS IN MAY, BUT THE FLORIDA SEASON CONTINUES UNTIL JULY. NEW CROP CALIFORNIA VALENCIAS BEGIN MOVING TO MARKET AS EARLY AS MARCH. THEY ARE THE CHIEF SUPPLY DURING THE SUMMER AND EARLY FALL, BUT ARE FOUND ON THE MARKET AS LATE AS DECEMBER.

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THE FRUIT SITUATION  
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Summary

The total movement of fruit into consuming channels continued heavy during the past month, and prices at terminal markets were at relatively low levels, summarizes the Bureau of Agricultural Economics. Apple prices held steady at the levels reached in mid-January, but prices of citrus fruits fluctuated somewhat irregularly.

Shipments of oranges were extremely heavy during the past month. Despite the heavy movement into consumption, however, remaining supplies of oranges for market between now and next fall are materially larger than the quantities marketed after the middle of March last season.

Total shipments of grapefruit were large during February and the first half of March. The supply available for fresh consumption during the remainder of the season now appears to be about one-fifth smaller than a year earlier. Favorable growing conditions in Texas and Arizona during February caused the fruit in these sections to "size up" better than was previously expected, and the March 1 estimate of grapefruit production was larger than that of a month earlier. The Texas crop is now indicated to be of record proportions.

The rate at which apples have been moving out of cold storage this season is much below average. March 1 stocks on hand were larger relative to the average March 1 holdings than were the January 1 stocks relative to the average for January 1. The failure of market prices of apples to show some seasonal rise thus far in the current season, appears to be due to at least three important factors -- storage stocks of record size, small export

demand relative to previous years of large supplies, and a declining level of consumer purchasing power since late in the fall of 1937. Record large supplies of citrus fruits also no doubt were a price-depressing factor.

Stocks of nearly all canned fruits except pears are indicated to be much larger than those of the early part of 1937. Compared with early 1937, slight price advances were indicated for canned western pears and Hawaiian pineapple, but California apricots recently sold slightly lower than in March last year, and canned apples and canned applesauce have been more than one-third below last spring's level. Prices of other canned fruits have not shown much fluctuation.

This issue of the Fruit Situation contains two articles of possible interest to growers and distributors of fruits, dealing with the analysis of apple prices and the uses of price outlook information on apples.

## ORANGES

Current shipments heavy

The movement of oranges into consuming channels during the past month was extremely heavy. Total shipments of oranges and tangerines - including relief purchases - from mid-February to mid-March were about one-third larger than during the same period a year ago, and more than one-fourth larger than average. Shipments of 1937 bloom oranges for the season through March 12 were about 8 percent greater than shipments of 1936 bloom oranges for the like portion of the previous season. Despite the heavier shipments, however, remaining supplies of oranges, including California Valencias, are materially larger than the quantities marketed after the middle of March last season.

For the current season through March 12, shipments of Florida oranges and Navels from California and Arizona were each about 15 percent ahead of shipments in the corresponding period of last year. Shipments of Texas oranges and Florida tangerines, however, were 40 percent and 22 percent, respectively, less than those of a year earlier. The first Valencias from California were shipped during the week ended February 19 and a total of 35 cars had moved by March 12. The California Valencia season is beginning about the same time as usual, although a few weeks earlier than last season.

California production indicated larger on March 1 than month earlier

The total production of all winter and early spring varieties of oranges was indicated on March 1 at more than 43 million boxes, compared with 38 million in 1936-37, and the 1931-35 average of 33 million boxes. The indicated production of California Navels was nearly 1 million boxes larger than indications a month earlier, but the estimate of the Florida crop was unchanged. The crop of California Valencia oranges, the chief supply during summer and early fall, was indicated at 25½ million boxes, more than 50 percent larger than the freeze-damaged crop of last season and second in size to the record crop of 1934-35. At the end of February, torrential rains and floods were quite general over most of the citrus-producing areas of southern California. Although it is still too early properly to evaluate storm and flood damage, preliminary reports indicate that the principal loss will be from decayed fruit, particularly in the case of Navels, as a result of the prolonged rainy weather.

Prices

Orange prices fluctuated irregularly during the past month, but continued very low relative to those of a year earlier and to the 1926-35 average of prices. Prices of Florida oranges at New York and Chicago declined during the latter part of February, but in the first 2 weeks of March rose again to about the levels of early February. Prices of California Navels rose rather sharply during February, but declined in early March.

The relatively large supply of oranges is, of course, an important factor causing the low level of orange prices this season. Important also, however, is the sharp reduction in consumer purchasing power that has occurred in recent months. Further declines in purchasing power would tend to curtail the seasonal rise in orange prices which usually occurs in the spring and early summer.

Table 1.- Citrus fruits: Production, average 1931-35, annual 1936 and 1937

Crop and States	Production <sup>1/</sup>		
	Average 1931-35	1936	Indicated 1937
	1,000 boxes	1,000 boxes	1,000 boxes
Oranges:			
Winter and spring varieties:			
Calif., Navels and miscel. ....:	15,175	13,234	16,716
Fla. all .....	16,824	22,500	23,750
Five other States .....	1,037	2,611	2,604
Total .....	33,036	38,345	43,070
Summer and early fall varieties:			
Calif., Valencias .....	19,965	16,829	25,536
Total 7 States .....	53,051	55,174	68,606
Grapefruit:			
Fla., all .....	11,997	18,100	13,000
Seedless .....	<sup>2/</sup> 3,533	6,000	5,000
Other .....	<sup>2/</sup> 8,333	12,100	8,000
Texas .....	2,105	9,630	10,200
Calif., .....	1,736	1,550	1,890
Ariz., .....	931	1,400	2,500
Total 4 States .....	16,369	30,680	27,590
Lemons:			
Calif., .....	8,045	8,102	<sup>3/</sup> 8,550
Limes:			
Florida .....	12	45	110

<sup>1/</sup> Relates to crop of bloom of year shown; picking beginning November 1 in California and September 1 in other States.

<sup>2/</sup> 1932-35 average.

<sup>3/</sup> January 1 indicated production.

Table 2.- Oranges: Weekly shipments from producing areas, by varieties and totals, 1936-37 and 1937-38

Week ended	1936-37				1937-38				
	: Cal.-	: Cal.-	: Cal.-	: Total	: Cal.-	: Cal.-	: Cal.-	: Total	: Relief
	: Ariz.	: Fla.	: Ariz.	: Total	: Ariz.	: Fla.	: Ariz.	: Com-	: Relief
: Valen-	: Valen-	: Navel&	: 2/	: Valen-	: 1/	: Navel&	: mer-	: pur-	
: cias	: cias	: Miscel.	:	: cias	:	: Miscel.	: cial	: chases	
:	:	:	:	:	:	:	:	:	
:	: cars	: cars	: cars	: cars	: cars	: cars	: cars	: cars	: cars
Oct. 9...	1,035	125	-	1,193	674	178	-	852	
16...	847	396	-	1,302	494	725	-	1,221	
23...	575	757	-	1,422	213	906	-	1,201	
30...	164	1,036	-	1,320	82	1,074	-	1,309	
Nov. 6...	43	1,217	78	1,541	1	1,220	56	1,521	
13...		1,184	963	2,473		957	281	1,509	
20...		1,483	1,519	3,634		1,516	872	2,652	
27...		871	1,189	2,628		966	1,213	2,506	
Dec. 4...		1,528	1,584	3,806		1,300	1,674	3,512	
11...		1,818	1,683	4,339		2,000	1,768	4,451	16
18...		2,034	895	3,917		2,311	338	4,042	69
25...		777	464	1,768		1,038	484	2,095	54
Jan. 1...		704	469	1,740		1,013	657	2,250	62
8...		1,207	563	2,452		1,345	835	2,653	43
15...		1,498	539	2,608		1,442	960	2,775	82
22...		1,609	659	2,937		1,415	849	2,700	44
29...		1,665	733	3,031		1,401	1,194	3,022	31
Feb. 5...		1,564	717	2,943		1,591	877	2,838	38
12...		1,184	667	2,487		1,953	1,287	3,613	141
19...		1,252	710	2,559	7	1,841	1,174	3,345	112
26...		1,148	691	2,408	12	1,773	1,465	3,488	139
Mar. 5...		1,231	1,027	2,649	3	1,610	633	2,485	203
12...		1,204	942	2,480	14	2,097	1,364	3,692	123

1/ Excluding relief shipments.

2/ Includes shipments from Texas, Louisiana, Alabama, and Mississippi, also Florida tangerines.

3/ Purchases made by Federal Surplus Commodities Corporation.

#### GRAPEFRUIT

#### Remaining supplies smaller than year ago

Shipments of grapefruit continued heavy during the past month. But for the season through March 12, total shipments were 9 percent smaller than to the corresponding date last year. Total shipments from Florida were more than one-fifth smaller than a year earlier, but Texas shipments were about 7 percent larger. The remaining supply of grapefruit available for fresh market, after allowing for estimates of the probable utilization by processing plants, is estimated to be about one-fifth less than the quantity marketed after the middle of March last year.

Crop prospects in Texas and Arizona improved during February

On March 1 an increase in grapefruit production over the estimate of a month earlier was indicated. The fruit had "sized up" better in Texas and Arizona than was previously expected as a result of continued favorable growing conditions. The total crop is estimated at 27.6 million boxes, compared with 30.7 million produced in 1936-37 and the 1931-35 average of 16.9 million boxes. Estimated production of Texas grapefruit for the 1937-38 season is placed at 10.2 million boxes, more than one-half million boxes larger than the 1936-37 crop, and the largest crop on record. Indicated production of Florida grapefruit on March 1 was 13 million boxes, the same as for a month earlier. Production of Arizona grapefruit for 1937-38 is estimated at 2.5 million boxes, compared with 1.4 million boxes last season.

Citrus groves in Texas and Florida are in excellent condition, and the bloom has been unusually heavy.

Table 3.- Grapefruit: Weekly shipments from producing areas and totals, 1936-37 and 1937-38

Week ended	1936-37 1/				1937-38			
	Fla.	Texas	Cal.- Ariz.	Total	Fla.	Texas	Cal.- Ariz.	Total
	cars	cars	cars	cars	cars	cars	cars	cars
Oct. 9...	532	14	63	609	469	-	30	499
15...	330	151	48	529	508	94	79	681
23...	523	429	54	1,006	607	631	67	1,305
30...	568	439	55	1,062	605	701	63	1,369
Nov. 6...	588	391	57	1,046	358	413	43	794
13...	503	373	31	912	356	403	52	811
20...	525	493	44	1,062	398	357	46	801
27...	558	461	36	1,085	419	550	30	999
Dec. 4...	525	442	45	1,012	532	742	26	1,300
11...	536	479	46	1,061	502	595	45	1,142
18...	559	337	46	942	517	522	33	1,077
25...	352	263	18	633	374	324	19	727
Jan. 1...	453	550	25	1,033	338	570	25	933
8...	755	722	43	1,526	548	510	33	1,090
15...	920	659	90	1,669	554	756	52	1,362
22...	823	860	75	1,753	600	1,013	51	1,669
29...	777	609	54	1,440	490	780	75	1,345
Feb. 5...	750	623	29	1,402	484	558	59	1,101
12...	792	945	34	1,771	537	667	68	1,272
19...	812	812	28	1,652	545	707	44	1,296
26...	756	653	26	1,435	531	557	58	1,146
Mar. 5...	696	676	43	1,415	567	762	40	1,369
12...	649	812	48	1,509	560	786	78	1,424

1/ Excluding relief shipments which for the entire season amounted to 1,822 cars from Florida, and 2,924 cars from Texas.

Prices.- After advancing in late January and early February, prices of Florida grapefruit at New York declined during the past month and, for the first time this season, are now slightly lower than prices of a year earlier. Prices of Texas grapefruit at Chicago have moved steadily upward since early February, and in the second week of March they averaged 22 cents per box more than in the same week last year.

Table 4.-Citrus fruits: Weighted average auction prices per box, New York and Chicago, 1936-37 and 1937-38

Week ended 1/	Oranges				Grapefruit				Lemons	
	Calif. Navels		Fla.		Fla.		Tex.		Calif.	
	1936-1937	1937-1938	1936-1937	1937-1938	1936-1937	1937-1938	1936-1937	1937-1938	1936-1937	1937-1938
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
New York										
City										
Dec. 4	3.01	3.00	2.40	2.62	1.91	2.69	2.30	2.64	3.69	7.43
11	2.86	2.69	2.22	2.60	1.94	2.44	2.37	2.17	3.69	5.76
18	2.89	2.64	2.35	2.25	2.14	2.32	2.23	1.98	3.87	5.44
25	2.91	2.44	2.30	2.35	2.15	2.52	2.17	2.12	3.95	5.47
Jan. 1	3.03	2.47	2.76	2.35	2.50	2.48	2.20	2.02	4.08	5.25
Mo. av.	2.93	2.66	2.38	2.43	2.10	2.49	2.26	2.15	3.85	5.82
Jan. 8	2.93	2.34	3.10	2.41	2.30	2.38	2.21	2.35	4.96	4.93
15	3.58	2.43	2.32	2.22	2.15	2.21	2.60	2.36	5.30	4.44
22	3.90	2.46	2.74	2.23	1.88	2.09	2.20	2.47	5.23	4.38
29	4.90	2.55	3.12	2.23	2.00	2.17	2.04	1.89	7.28	4.35
Mo. av.	3.60	2.44	2.94	2.37	2.08	2.21	2.19	2.18	5.57	4.52
Feb. 5	4.48	2.52	3.03	2.27	1.87	2.29	1.92	1.87	6.56	4.08
12	4.66	2.90	3.26	2.25	2.02	2.36	1.57	2.00	6.37	4.02
19	4.06	2.92	3.80	2.05	2.04	2.25	2.36	2.06	5.80	3.98
26	3.87	3.11	3.70	2.02	2.01	2.22	---	2.23	4.94	4.30
Mo. av.	4.21	2.85	3.42	2.14	1.98	2.23	1.91	2.02	5.89	4.10
Mar. 5	3.75	2.66	3.83	2.06	2.17	2.08	2.34	2.36	4.99	4.05
12	4.02	2.79	3.72	2.34	2.29	2.21	2.22	2.43	5.42	4.99
Chicago										
Dec. 4	2.93	2.88	2.59	2.57	2.08	2.12	1.93	2.21	4.03	7.49
11	2.90	2.72	2.41	2.62	1.57	1.96	1.81	2.09	3.95	5.87
18	2.94	2.72	2.22	2.37	1.85	1.81	1.90	2.00	4.02	5.42
25	2.93	2.65	2.47	2.17	---	---	2.28	2.07	4.38	5.12
Jan. 1	2.83	2.43	3.32	2.87	2.12	2.60	2.45	2.04	4.43	5.08
Mo. av.	2.91	2.65	2.45	2.45	1.80	1.96	2.07	2.06	4.14	5.54
Jan. 8	2.82	2.34	2.94	2.46	2.36	2.09	1.99	1.91	5.04	5.09
15	3.70	2.32	3.02	2.12	1.90	2.11	1.80	1.96	5.97	4.67
22	3.87	2.39	2.83	2.17	1.58	2.35	1.83	2.03	5.61	4.44
29	4.65	2.43	3.77	2.07	1.92	1.61	1.97	1.84	7.58	4.13
Mo. av.	3.76	2.37	3.07	2.20	1.96	2.04	1.91	1.91	5.96	4.56
Feb. 5	4.35	2.64	3.29	2.34	1.74	2/1.76	1.93	1.82	6.76	4.14
12	3.99	2.64	3.22	2.32	1.99	1.86	1.95	1.92	5.78	4.25
19	3.34	2.90	3.61	2.11	1.99	1.93	1.80	1.92	5.55	4.23
26	3.90	2.74	3.96	2.07	1.83	2.04	1.83	1.99	5.32	4.22
Mo. av.	4.00	2.73	3.41	2.23	1.87	1.92	1.86	1.93	5.34	4.22
Mar. 5	3.91	2.73	3.75	2.06	1.84	2/2.71	1.76	2.24	5.42	4.50
12	3.89	2.88	3.83	2.14	2.21	2.02	2.05	2.27	5.58	5.03

1/ Based on 1937-38 calendar.

2/ Only 1 quotation.

## APPLES

March 1 cold storage stocks largest on record

Apples have been moving out of cold storage this season at a rate much below average. Stocks on hand March 1 were larger relative to the average March 1 holdings than were the January 1 stocks relative to the average for January 1. Cold storage stocks of apples on March 1 amounted to nearly 20 million bushels, about 37 percent larger than the 1927-36 average March 1 holdings. Stocks of western boxed apples were about the same as the 10-year average, but March 1 stocks of eastern apples were the largest on record.

The quantity of apples which moved out of cold storage during February this year amounted to 6.7 million bushels compared with the average of 6.2 million bushels. Substantial purchases of apples were made in February by the Federal Surplus Commodities Corporation for relief distribution, however, so the quantity of cold storage apples moving into commercial channels during February was probably slightly less than average. It is likely that the movement into consumption from common storage was relatively heavy during February, which would partially offset the lighter movement out of cold storage.

Exports of apples relatively light in January

Total exports of apples in January this year amounted to 1.6 million bushels. Although this quantity was 75 percent greater than exports in January 1936, it was 40 percent less than in January 1932, when domestic apple supplies were almost as large as in the current season.

Table 5.--Apples: March 1 cold storage holdings and percentage reduction in stocks during February, 1927 to 1938

Year	:Baskets and barrels 1/ :		Western boxes :		Total	
	:Mar. 1 cold:Reduction :		:Mar. 1 cold:Reduction :		:Mar. 1 cold:Reduction	
	: storage :	: Feb. 1 to :	: storage :	: Feb. 1 to :	: storage :	: Feb. 1 to
	: holdings :	: Mar. 1 :	: holdings :	: Mar. 1 :	: holdings :	: Mar. 1
	: 1,000 bu.	Pct.	: 1,000 bu.	Pct.	: 1,000 bu.	Pct.
1927	: 8,045	31.1	7,298	30.1	15,343	29.3
1928	: 4,074	33.4	7,023	28.4	11,097	30.3
1929	: 5,555	32.6	7,995	55.5	13,550	34.3
1930	: 5,496	30.9	7,282	23.2	12,778	29.4
1931	: 4,301	38.3	11,371	25.9	15,672	29.8
1932	: 7,468	36.0	8,799	25.3	16,267	30.6
1933	: 7,064	29.3	7,179	29.1	14,243	29.2
1934	: 4,982	30.6	6,591	23.7	11,573	29.5
1935	: 6,098	27.9	7,839	36.4	13,937	32.9
1936	: 8,555	27.1	9,371	27.6	17,926	27.3
Average :						
1927-36:	6,164	31.5	8,074	29.5	14,238	30.4
1937	: 5,334	34.0	6,809	26.0	12,143	29.8
1938	: 11,556	24.6	8,017	26.9	19,573	25.6

1/ Includes eastern boxes or crates, barrels converted on basis of 1 barrel equivalent to 3 bushels.

Table 6.-Apples, eastern: L.c.l. price per bushel, Chicago and New York, by specified varieties and weeks, 1936-37 and 1937-38

Market and date	1936-37				1937-38			
	Michigan		All		Michigan		All	
	Mc- Intosh	Green- ing	Bald- win	varie- ties	Mc- Intosh	Green- ing	Bald- win	varie- ties
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
<b>Chicago</b>								
Nov. 6	1.62	1.62	1.52	1.38	1.25	.92	1.01	1.06
13	1.64	1.25	1.64	1.47	1.36	.97	1.01	1.05
20	1.75	1.52	1.80	1.62	1.32	.90	1.06	1.03
27	1.75	1.42	1.79	1.62	1.24	.99	1.20	1.05
Dec. 4	1.37	1.63	1.78	1.74	1.32	1.00	1.21	1.10
11	1.75	1.44	1.66	1.61	1.38	1.13	1.27	1.15
18	1.74	1.42	1.62	1.57	1.38	1.12	1.28	1.22
25	1.68	1.32	1.68	1.50	1.38	1.18	1.28	1.25
Jan. 1	1.69	1.38	1.71	1.53	1.38	1.08	1.25	1.21
8	1.71	1.38	1.86	1.58	1.28	1.03	1.20	1.18
15	1.68	1.38	1.74	1.60	1.26	.92	1.20	1.08
22	1.75	1.44	1.90	1.64	1.08	.88	1.10	.95
29	1.66	1.36	1.38	1.60	1.10	.88	1.10	.99
Feb. 5	1.82	1.38	1.95	1.72	1.13	.90	1.12	.97
12	1.84	1.34	2.10	1.73	1.20	.92	1.12	1.00
19	1.82	1.40	2.24	1.81	1.13	---	1.08	.99
26	1.75	1.50	2.22	1.87	1.25	---	1.11	1.00
Mar. 5	1.88	1.46	2.24	1.84	1.25	---	1.12	1.00
12	1.95	1.50	2.38	1.92	1.23	1.05	1.12	1.00
<b>New York</b>								
	1936-37				1937-38			
	New York		All		New York		All	
	Mc- Intosh	Green- ing	Bald- win	varie- ties	Mc- Intosh	Green- ing	Bald- win	varie- ties
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Nov. 6	1.98	1.36	1.12	1.05	1.37	.86	.75	1.11
13	2.00	1.36	1.12	1.53	1.29	.92	.74	1.16
20	2.00	1.35	1.23	1.48	1.12	.94	.82	1.12
27	2.00	1.38	1.32	1.44	1.10	.94	.72	1.09
Dec. 4	1.95	1.53	1.36	1.64	1.34	.92	.70	1.13
11	1.94	1.34	1.40	1.55	1.34	.92	.72	1.17
18	1.91	1.32	1.36	1.48	1.37	.90	.77	1.13
25	1.91	1.52	1.36	1.51	1.23	.88	.79	1.12
Jan. 1	1.86	1.36	1.33	1.58	1.26	.84	.82	1.07
8	1.88	1.30	1.33	1.60	1.30	.86	.81	1.08
15	1.88	1.37	1.42	1.71	1.24	.78	.81	1.05
22	1.90	1.27	1.33	1.65	1.23	.80	.83	.99
29	1.89	1.33	1.42	1.73	1.22	.85	.81	1.00
Feb. 5	1.88	1.38	1.45	1.65	1.24	.81	.78	.99
12	1.96	1.36	1.47	1.78	1.25	.78	.80	1.00
19	2.12	1.39	1.50	1.87	1.25	.71	.79	.99
26	2.13	1.44	1.53	1.93	1.24	.86	.76	.98
Mar. 5	2.23	1.52	1.60	2.01	1.25	.88	.80	1.02
12	2.30	1.62	1.65	2.06	1.27	.95	.79	1.06



Table 8.- Apples: Exports in January to specified countries, averages 1927-31 and 1932-36, annual 1932, 1936, 1937, and 1938

Countries of destination	January average		January			
	1926-27	1931-32	1932	1936	1937	1938
	to	to				
	1,000	1,000	1,000	1,000	1,000	1,000
	<u>barrels</u>	<u>barrels</u>	<u>barrels</u>	<u>barrels</u>	<u>barrels</u>	<u>barrels</u>
<u>In barrels:</u>						
United Kingdom .....	212	117	240	112	34	66
Germany .....	40	24	19	1	2	1
Netherlands .....	18	7	16	1/	1/	0
Belgium .....	25	30	40	18	10	30
France .....	6	15	53	7	1	3
Denmark .....	10	1	1/	0	0	0
Other Europe .....	13	3	6	13	3	4
Total Europe .....	324	202	379	151	50	104
Other Countries .....	13	2	1	3	3	3
Total .....	337	204	380	154	53	107
	1,000	1,000	1,000	1,000	1,000	1,000
	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>	<u>boxes</u>
<u>In boxes:</u>						
United Kingdom .....	481	423	657	293	149	464
Germany .....	323	260	307	29	109	77
Netherlands .....	129	222	276	71	53	139
France .....	13	150	124	196	160	249
Other Europe .....	105	95	110	51	46	117
Total Europe .....	1,056	1,155	1,474	640	522	1,046
Canada .....	16	2	2	5	126	23
Argentina .....	12	1	2	0	0	0
Brazil .....	7	10	12	0	2	2
Philippine Is. ....	13	14	21	11	9	13
Palestine .....	1/	7	1	17	14	11
Egypt .....	15	5	0	11	14	25
Cuba .....	7	4	2	6	6	9
Other Countries .....	34	29	23	29	24	55
Total .....	1,160	1,227	1,542	719	717	1,184
	1,000	1,000	1,000	1,000	1,000	1,000
	<u>baskets</u>	<u>baskets</u>	<u>baskets</u>	<u>baskets</u>	<u>baskets</u>	<u>baskets</u>
<u>In baskets</u>						
Belgium .....		31	7	22	21	61
United Kingdom .....		13	7	19	13	31
Germany .....		9	7	0	0	1
France .....		12	5	22	0	10
Canada .....		1/	0	1	1	2
Other Countries .....		3	1/	3	1	2
Total .....		73	26	67	36	107
	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.	1,000 bu.
Grand total 2/	2,171	1,912	2,703	1,246	912	1,612
1/ Less than 500 barrels.						
2/ 1 barrel assumed equivalent to 3 bushels.						

Prices remain steady

Prices of apples at terminal markets have held steady during the past 2 months. Auction prices of western apples at New York averaged \$1.46 per box in the second week of March, \$1.53 a month earlier, and \$1.71 two months earlier. The general averages of eastern apple prices for the same 3 weeks were \$1.06, \$1 and \$1.05, respectively.

The failure of market prices of apples to show some seasonal rise thus far in the current season appears to be due to at least 3 important factors - storage stocks of record size, small export demand relative to previous years of large supplies, and a declining level of consumer purchasing power since late in the fall of 1937. Record large supplies of citrus fruits also no doubt have been a price repressing factor.

## CANNED FRUITS

The relatively large packs of important fruits in 1937 have resulted in rather heavy stocks of canned fruits this spring. Stocks of nearly all canned fruits except pears are indicated to be much larger than those of the early part of 1937. The January 1 stocks of California canned apricots were reported to be three times those of a year earlier; the supply of California peaches was 65 percent greater than on January 1, 1937, and fruit cocktail almost 60 percent greater. January 1 stocks of California canned pears were about 37 percent less than those of the year before.

Compared with early 1937, slight price advances were indicated for canned western pears and Hawaiian pineapple, but California apricots recently sold slightly lower than in March last year. The recent wholesale price of canned apples has been one-third below that of a year ago, and canned apple sauce was selling at 40 percent below last spring's level. Other important canned fruits have not shown much fluctuation of price.

The quantity of fruit to be canned (or dried) cannot be forecast accurately, because the price of fruit on the fresh market controls to some extent the canning operations. In view of the probable large carryover of canned fruits and the likelihood that the total production of fresh fruit in 1938 will be somewhat smaller than the exceptionally large production in 1937, it is likely that the quantity of fruit canned this season will be less than the large packs of 1937.

Table 9.- Canned fruits: Pack, 1936 and 1937; stocks on hand, 1937 and 1938  
(Cases of 24 No. 2½ cans, except as otherwise noted)

Commodity	Pack		Stocks on hand		
	1936	1937	Date	1937	1938
	1,000	1,000		1,000	1,000
	<u>cases</u>	<u>cases</u>		<u>cases</u>	<u>cases</u>
Apples .....	1/ 2,620	2/	----	2/	2/
Apple sauce .....	1/ 2,257	2/	----	2/	2/
Apricots, Calif. ...	2,899	5,553	Jan. 1...	1,080	3,202
Cherries:					
Sweet, Calif. ...	3/ 200	240	Jan. 1...	72	89
Red pitted .....	1/ 1,450	1/2,341	Mar. 1...	71	666
Figs, Calif. ....	310	406	----	2/	2/
Fruit cocktail ....	2,221	3,221	Jan. 1...	1,345	2,116
Fruits for salad ...	1,467	1,255	Jan. 1...	787	313
Grapefruit					
hearts & juice...	4/10,387	(25% less)	----	2/	2/
Peaches, Calif. ...	10,327	13,359	Jan. 1...	5,051	8,315
Pears:					
Total pack .....	5,576	(smaller)	----	2/	2/
Calif. pack .....	2,415	1,499	Jan. 1...	1,260	793
Pineapple, Hawaii,					
Fruit .....	12,000	11,600	----	2/	2/
Juice .....	5,000	7,000	----	2/	2/
Plums & prunes ....	1/ 2,007	2/	----	2/	2/

1/ Actual cases, instead of cases of 24 No. 2½ cans.

2/ Data not available.

3/ Total pack (all States) was 570,000 actual cases.

4/ Cases of 24 No. 2 cans.

Table 10.- Canned fruits: Wholesale price per dozen cans, f.o.b. factory, specified periods, 1937-38

Commodity	Size of can	Factory location	Mar. 15,	Sept. 20,	Jan. 3,	Mar. 14,
			1937	1937	1938	1938
			Dollars	Dollars	Dollars	Dollars
Apples, std. heavy-pack	No. 10	East	4.05	4.05	2.90	2.70
Apple sauce, std. ....	No. 10	"	4.63	4.13	2.75	2.75
Apricots, choice .....	No. 2½	West	1.75	1.78	1.78	1.70
Cherries, red pitted ...	No. 2	East	1.32	1.35	1.35	1.32
Fruits for salad, fancy	No. 2½	West	2.50	2.58	2.58	2.52
Grapefruit hearts .....	No. 2	South	.98	1.13	1.03	1.00
Peaches, yellow cling..						
choice .....	No. 2½	West	1.60	1.60	1.60	1.60
Pears, Bartlett, choice	No. 2½	"	1.60	1.70	1.70	1.70
Pineapple, Hawaiian,						
std., sliced .....	No. 2½	West	1.70	1.85	1.85	1.35

Compiled from weekly issues of "The Canning Trade," Baltimore, Md.

## APPLE PRICE STATEMENTS IN OCTOBER 1937

Following the release of the October issue of the Fruit Situation (on October 21), the Bureau of Agricultural Economics received a number of communications protesting issuance of statements indicating probable developments in apple prices. These protests were in all cases based upon the supposition that the statements actually caused prices to decline.

The October Fruit Situation contained the following significant statements with reference to apples.

A summary paragraph said:

"Some improvement occurred in the apple crop during September, and on October 1 indications pointed to a crop slightly larger than that indicated a month earlier and the largest since 1926. It seems likely that the season low point in prices of eastern apples has been passed, but prices of apples from the Western States may experience some further decline."

A more detailed statement with reference to apples included the following:

"Prices of eastern apples in terminal markets continued their seasonal decline during the past month, but have now probably passed the season low point. Prices of apples from the Pacific Northwest also have declined slightly but have been relatively high thus far, owing to the late season and consequent light shipments from this area. Further declines in prices of western apples may be experienced as the movement of apples from the Northwest gains in volume. The seasonal rise in apple prices during the latter part of the current marketing year is expected to be somewhat less than usual, in view of the extremely large crop and the possibility of lower consumer buying power during the first half of 1938.

"On October 1 the total 1937 apple crop was indicated at 206,716,000 bushels, which is slightly above that indicated a month earlier, and is the largest crop since 1926. Some improvement in the crop occurred during September in the Atlantic Coast States and in the North Central States, but in the Western States prospects declined slightly. The indicated 1937 crop in the Western States is about the same as the 1931-35 average of 52-1/2 million bushels. In the Atlantic Coast States the crop is indicated at more than 94 million bushels, and in the Central States at almost 60 million bushels."

Let us examine the facts as to the apple supply and demand situation in October and the developments since issuance of the Situation report on October 21.

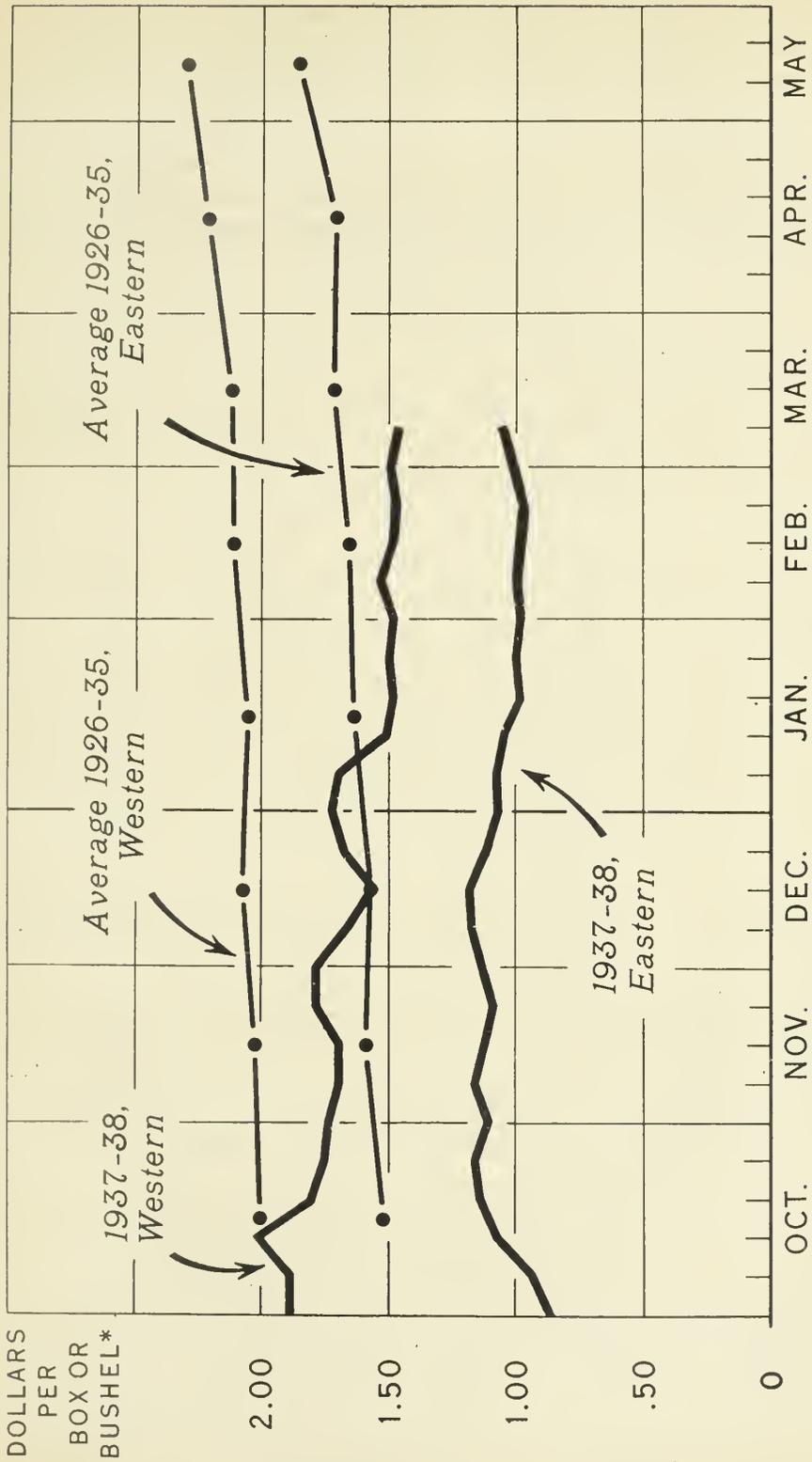
The total apple crop was indicated at 207 million bushels on October 1. Subsequent indications pointed to an even larger crop, estimated in December at 211 million bushels compared with 202 million bushels in 1931-32 and 221 million bushels in 1926-27. These three crops have been the largest in the past 20 years. Prices of apples from the Pacific Northwest in mid-October were extremely high relative to eastern apple prices, the spread between them being almost twice as great as average. In table 11 and figure 1, weekly average prices at New York of eastern and western apples are shown for the current season, together with 10-year (1926-35) averages of monthly prices. The usual spread between prices of eastern and western apples on the New York market is indicated by the spread between the 10-year monthly average prices.

Table 11.- Apples, Western and Eastern: Prices and spread at New York City, monthly average 1926-35, weekly average 1937-38

Week ended	1937-38			Month	1926-35 average		
	Western	Eastern	Spread		Western	Eastern	Spread
	Dollars per box	Dollars per bu.	Dollars		Dollars per box	Dollars per bu.	Dollars
Oct. 1	1.89	.87	1.02				
8	1.89	.94	.95				
15	2.00	1.08	.92	Oct.	2.00	1.52	.48
22	1.80	1.14	.66				
* 29	1.76	1.16	.60				
Nov. 5	1.74	1.11	.63				
12	1.70	1.16	.54				
19	1.70	1.12	.58	Nov.	2.02	1.59	.43
26	1.79	1.09	.70				
Dec. 3	1.79	1.13	.66				
10	1.67	1.17	.50				
17	1.56	1.18	.38	Dec.	2.07	1.57	.50
24	1.68	1.12	.56				
Jan. 1	1.73	1.07	.66				
8	1.70	1.08	.62				
15	1.51	1.05	.46	Jan.	2.05	1.64	.41
22	1.49	.99	.50				
29	1.50	1.00	.50				
Feb. 5	1.49	.99	.50				
12	1.53	1.00	.53				
19	1.49	.99	.50	Feb.	2.11	1.66	.45
26	1.48	.98	.50				
Mar. 5	1.49	1.02	.47				
12	1.46	1.06	.40	Mar.	2.12	1.72	.40
				Apr.	2.21	1.71	.50
				May	2.30	1.86	.44

\* - Fruit Situation containing price statements released on October 21, 1937.

# APPLES, EASTERN AND WESTERN: PRICES AT NEW YORK, AVERAGE 1926-35, AND 1937 TO DATE



\* EASTERN APPLES PER BUSHEL; WESTERN APPLES PER BOX

U. S. DEPARTMENT OF AGRICULTURE

NEG. 34111

BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 1.— PRICES OF WESTERN APPLES IN MID-OCTOBER WERE EXTREMELY HIGH RELATIVE TO EASTERN APPLE PRICES. THE SPREAD BETWEEN THEM AT THAT TIME WAS ALMOST TWICE AS GREAT AS THE AVERAGE SPREAD. THE STEADY DOWNWARD TREND IN WESTERN APPLE PRICES SINCE MID-OCTOBER APPEARS TO HAVE BEEN A NORMAL ADJUSTMENT TO EXISTING SUPPLY AND DEMAND CONDITIONS.

FIGURE 1

Prices of eastern apples in early October and during the season to date have been low compared with the 1926-35 average, although it does not appear that they have been any lower than one would expect in view of the extremely large supply of apples and other fruits, and because of existing demand conditions. The total 1937 crop of apples was 80 percent larger than the crop of the preceding year, and 31 percent greater than the 1931-35 average production.

Terminal market prices of western apples in early and mid-October were almost as high as the 1926-35 average October price, and apparently at too high a level for western apples to be moved into consuming channels in competition with the eastern product. A very sharp drop in prices of western apples at New York occurred during the week ended October 22. Inasmuch as the price statement did not appear until late in the afternoon of October 21, it can hardly be held responsible for this initial break in the market. The steady downward trend which has occurred in western apple prices since mid-October appears to have been a normal adjustment to existing supply and demand conditions. In mid-January, prices of western apples at New York were about as low relative to the 10-year average for January as were prices of eastern apples.

It is realized that the price paid at the principal shipping points is of more immediate significance to the growers than prices paid at distant markets. The Wenatchee and Yakima districts of Washington are the principal shipping areas for Pacific Northwest apples. It is important, therefore, to note the change in prices of apples at these points, day by day, for a period preceding and for a period immediately following the release of the Fruit Situation on October 21. Table 12 shows daily f.o.b. prices at Wenatchee and Yakima of three varieties of apples by grades for the period October 15 to November 2. It will be noted that prices held steady following the release of the Fruit Situation.

Table 12.- Apples: F.o.b. prices at Wenatchee and Yakima, Washington, by varieties and grades, daily, October 15, 1937 to November 2, 1937 (Medium to large sizes)

Date	Delicious			Jonathan		Winesap	
	Extra Fancy	Fancy	C Grade	Extra Fancy	Fancy	Extra Fancy	Fancy
	Dol. per box	Dol. per box	Dol. per box	Dol. per box	Dol. per box	Dol. per box	Dol. per box
1937							
Oct. 15	:1.30-1.40	1.20	---	No quotations			
18	:1.25-1.40	1.10-1.25	1.00	.80-1.00	.80-.90	1.10-1.20	
19	:1.25-1.40	1.10-1.20	---	.90-.95	.75-.85		
20	:1.25-1.40	1.10-1.20	---	.75-.85	.65-.75		
21	:1.25-1.35	1.20				1.10	
22	:1.25-1.40			.95		1.05	1.00
25	:1.25-1.35	1.15-1.20				1.10	
26	:1.15-1.35					1.00	
27	:	1.15-1.20					1.00
28	:1.15-1.35	1.15-1.20		.90		1.10	1.00
29	: No quotations						
Nov. 1	:1.25-1.40	1.10-1.25		.90	.75	1.15	1.00
2	:1.25-1.37 $\frac{1}{2}$	1.15	.85			1.15	

It has been asserted that buyers, immediately after the price statement was made public, stayed off the market to wait until the bottom had been reached. Table 13 contains some information bearing on this point. In it are tabulated weekly sales of western apples on the New York and Chicago auction markets. It will be noted that sales of apples at these two markets in the weeks following the release of the Bureau's statement were generally larger than in the week preceding.

Table 13.- Apples, Western: Number of boxes sold on the New York and Chicago auction markets, all grades and varieties, by weeks, 1937-38 to date

Week ended		New York	Chicago
		Boxes	Boxes
Oct.	1	11,814	12,410
	8	11,292	23,157
	15	35,267	22,602
	22	25,357	21,135
*	29	33,956	20,820
Nov.	5	30,200	24,613
	12	36,977	27,312
	19	37,907	34,985
	26	30,838	18,856
Dec.	3	33,148	30,340
	10	40,797	29,868
	17	40,807	34,381
	24	39,930	36,846
Jan.	1	26,150	17,777
	8	32,644	33,922
	15	35,814	24,630
	22	36,433	28,238
	29	35,622	23,156
Feb.	5	38,183	

\* - Price statements appeared in Fruit Situation, October 21, 1937.

Whereas the usual seasonal movement of apple prices is generally upward from October to late spring (as shown by the 10-year monthly average curves in figure 1), it is not unusual for some downward movement to occur after October in a year of extremely large supplies. And this was particularly true in late 1937 when the demand picture became clouded by the declines in business activity, consumer incomes, and the general price level. The 1931-32 season, like the present one, was characterized by large supplies of apples and a declining price level. In table 14 monthly average prices of western apples at New York are given for the 1931-32 season. During that season, prices showed no rise until after January, and then the upward movement did not carry prices quite up to the October level.

Table 14.- Apples, Western: Monthly average auction prices at New York, 1931-32 and 1937-38

Month	1931-32	1937-38
	Dollars per box	Dollars per box
Oct. ....	1.78	1.85
Nov. ....	1.77	1.74
Dec. ....	1.77	1.67
Jan. ....	1.60	1.54
Feb. ....	1.65	1.50
Mar. ....	1.72	
Apr. ....	1.74	
May ....	1.60	

A contributing factor to the weakness which developed in apple prices during the current season is the relatively small export demand. During the 1931-32 season, with a large crop and low prices in this country, about 13 million bushels of apples were exported during the 7 months from July through January, and the season total was 18 million bushels. During the period from July through January of the current season, the quantity of apples exported amounted to only 7 million bushels, and it is doubtful if the total for the season will be more than 10 million bushels. This decline in our export market has, of course, increased the quantity of apples available for domestic markets and has no doubt had an adverse influence upon domestic prices.

The comparatively unfavorable export situation this season is due to a number of factors. Important among them is the competition with Canadian apples in Great Britain, our most important foreign market for apples. The duty on imports into Great Britain of apples from the United States amounts to 1 cent per pound, whereas the duty on Canadian apples is only a fraction of this amount. The apple crop in Canada this year, like our own, was very large, and with the preferential duty, exports of Canadian apples to Great Britain have been comparatively large.

Another important factor is the almost complete loss of the German market, which in 1931-32 was our second most important foreign outlet for apples. The restrictions placed upon imports by the German Government have practically shut out our apples from German markets. Exports of apples to that country from July through January this season amounted to only 3 percent of total exports of apples. Exports of our apples to France, formerly our third most important export market, have suffered by the devaluation of the franc, which has had the same effect as an increase in the duty. France has also established import quotas, on a physical basis, which place a definite limit upon the quantity of apples from the United States which might be marketed in that country, regardless of the exchange situation. Thus far, however, imports of American apples have been less than the quotas. Exports of our apples to other European countries are also hampered by high duties and trade restrictions.

VALUE OF PRICE FORECASTS TO APPLE GROWERS 1/

Research economists of the Department of Agriculture are analyzing prices as an aid in the production and distribution of farm products.

For many years the Bureau of Agricultural Economics has collected data for the purpose of estimating the quantities of farm products produced. As to why one should want to know the volume of production, the answer is simply that the quantity produced affects the price. Suppose the crop indications for a certain year in July or August are for a production of 100 million bushels of apples. What price can one expect for that quantity? How different will it be from the price in another year, when production is 150 million bushels, and in a third year when production is 200 million bushels? Experienced men in the trade try to outguess each other as to what may be the significance of these different quantities, as affecting the price. The farmer sells to the man who makes the best offer; and each buyer is trying to guess at what price he may be able to sell the apples he buys. They are all guessing largely in view of the indications of the size of the crop. In the Bureau's price analysis work, the economists are trying to develop measures of the relationship between the price and the quantity produced.

The effect of variation in crop sizes upon apple prices is indicated in figure 2, in which are plotted index numbers of apple production and apple prices. During the 10 years prior to 1930 price varied inversely with production with marked regularity. Above-average production was accompanied by below-average price, and vice-versa. Since 1930, however, this relationship has been less regular, and the movement of prices indicates that production is not the only important factor affecting apple prices. During the depression years, sharp reductions in consumer purchasing power and in the general price level lowered the level of apple prices. For example, the 1931 crop, which though large, was smaller than that produced in 1926, sold at prices much lower than were received in 1926. In 1932 a much smaller crop sold at prices even lower than were received for the apples grown in 1931.

1/ This article is based upon a statement presented by Dr. O. C. Stine of the Bureau of Agricultural Economics before a meeting of the directors of the Middle Atlantic Fruit Growers Conference held in Washington, D.C. on March 1, 1938. The fruit growers attending this meeting expressed considerable interest in the material contained in this article, and it was thought that it should be reproduced in the Fruit Situation as of possible interest to those growers not attending the Washington meeting.

# APPLES: INDEX NUMBERS OF PRODUCTION AND PRICE

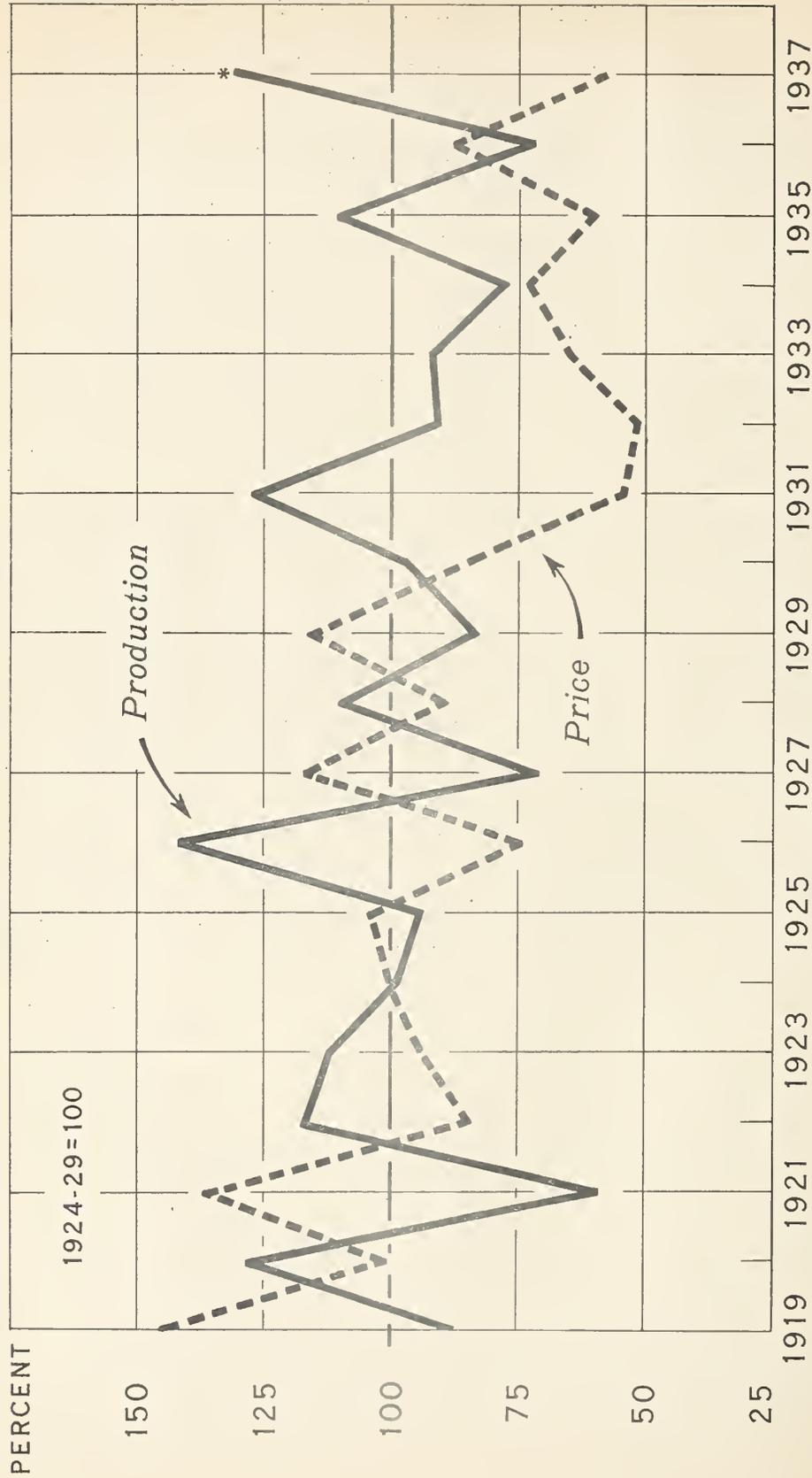
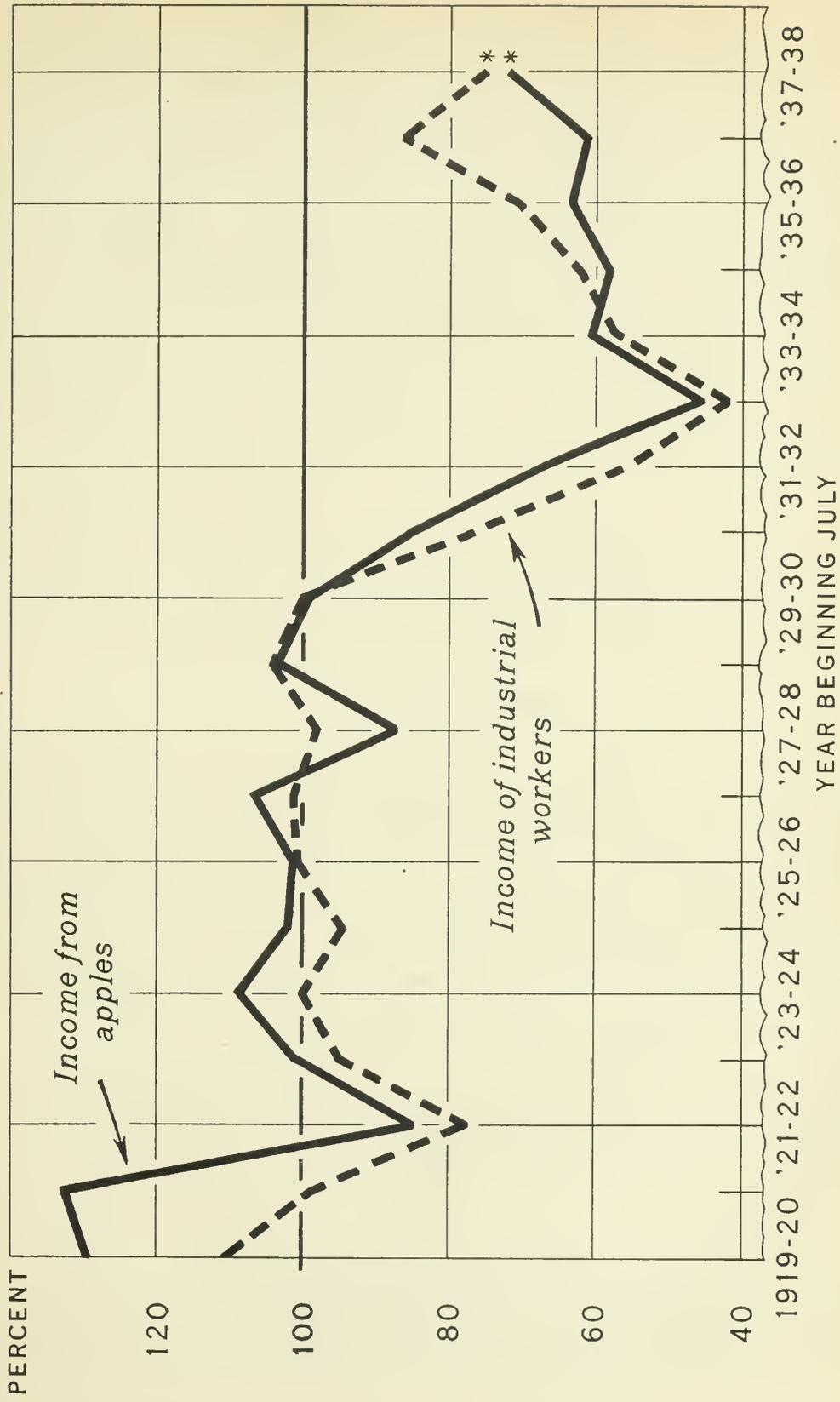


FIGURE 2

# CASH FARM INCOME FROM APPLES AND INCOME OF INDUSTRIAL WORKERS, UNITED STATES, 1919 TO DATE

INDEX NUMBERS ( 1924-29 = 100 )



\*ROUGH ESTIMATE

FIGURE 3

Consumer purchasing power important factor

The influence of consumer incomes on apple prices is shown more effectively if one compares changes from year to year in consumer incomes with changes in the total money received by growers each year for their apples. In figure 3 the yearly average index numbers of incomes of industrial workers - which reflect changes in the incomes of a considerable part of the consuming public - are compared with estimates of cash farm income from apples expressed in percentage form. Cash farm income, of course, is determined by both prices received and the quantity of apples sold. Since changes in apple production are not exactly proportional to changes in apple prices, one would not expect the two curves in figure 2 to fluctuate exactly together. The fact that they usually move in the same general direction is significant, and is evidence that any analysis of apple prices must consider changes in consumer incomes as well as variation in size of the apple crop. These two factors appear to be of primary importance in determining apple prices. There are, of course, many other factors which may affect apple prices, some of which may be especially important in particular seasons, and which must be considered in analyzing the price outlook for a given crop.

It is evident, therefore, that apple prices are not the result of arbitrary opinions of buyers and sellers, but are determined by certain fundamental conditions of supply and demand which can be anticipated in large measure before they occur. This makes it possible to look ahead and gauge the probable course of apple prices, with a fair degree of confidence that the forecast will prove correct.

Many grower-uses of price indications

The grower has many uses for these indications of probable prices. He is first confronted with the problem at the time of planting or buying an orchard. Recognizing that yields and prices may vary greatly from year to year, he needs to know what will be the general trend over a period of years. He may know that others are planting apple trees, but he needs to know whether or not the supplies to be expected from the plantings will sell for prices that through a period of years will justify the costs he must incur in developing the orchard or will bring him a reasonably satisfactory income. This need is merely for a general trend of the price of apples for comparison with trends in prices of other things that might be produced. The Bureau is trying to meet this demand in its annual outlook report.

The grower may find it advantageous to have in view, or to form in the fall and spring, a well-founded judgment as to probable prices the next season, for consideration in deciding how to treat the orchard or what expenditures he may lay out upon it with the expectation of reimbursement in the season; what obligations he may undertake with a reasonable hope of being able to meet them from the sale of the crop. Price forecasts for the year ahead, of course cannot be very definite. Insofar as the Department of Agriculture can provide an indication of the probable income of consumers, that can contribute something. We know from experience that the past year's crop and weather conditions in the fall and winter are factors of some importance in determining the quantity that is likely to be harvested the following season. By analyzing

these factors, it is undoubtedly possible to present information that will be helpful to many growers in planning their handling of the apple crop several months ahead of the harvest.

The next point at which growers probably can use advantageously information as to probable prices is in the harvesting and marketing season. It appears that in the present season it has not paid to store much, if any, of the low-grade stock. Perhaps it ought not to have been picked and, if picked, not packaged. Who knew in July and August? Everybody ought to have known this. They ought to have known that with a crop of 200,000,000 bushels, the prices of even the best apples would be low. Facing this situation, money could have been saved by not spending so much on the handling of poor-grade stuff. And while the producers of low-grade stuff were saving themselves expenditures they could not expect to recover, producers of the better-grade produce would be obtaining better returns.

To be more specific, one might list the points of decision at which indications of probable prices within the season could be useful in harvesting and marketing:

- What classes and grades of apples should be picked?
- What classes and grades of apples will pay packaging?
- What will pay storage?
- Are the prices offered now reasonable in view of the supply and demand situation?
- As the season progresses, what is the best time to sell the stored apples?

Growers and distributors have the problem of sizing up markets or deciding where and when to market at some distant point. In making these decisions they need to know the quantities that are likely to be shipped from other sources into these same markets and what will be their effects upon prices. It is known in general that any market can be flooded, and that when the quantities flowing into the market are light, prices may be relatively high. Price analysis can be used advantageously in attempting to determine at what rate a market can be fed without significantly affecting the prices; or in determining what prices are to be expected from the flow of a given quantity of apples into the market. Shippers commonly recognize the need of information as to quantities produced in competing areas and the volume of shipments. The Bureau of Agricultural Economics is trying to establish the price relationships so that growers and shippers generally may have a better understanding of the probable results of a given situation or of changes in the flow of apples into the market.

#### Regional problems involved

Another field in which price analysis can play an important part is in determining the relative positions of the producers in different regions growing apples, and the choice of varieties to grow. The physical conditions that determine the choice of varieties are, of course, important, but the limitations upon the quantities of any particular variety or group of

varieties that may be grown and marketed profitably are determined by competition in the market as reflected in prices. It is evident from preliminary analysis that the prices of the apples of particular regions are significantly affected by variations in supplies within that region, and the relation of the supplies that may be received in the markets of that area from other regions. It appears also that the prices of varieties are related to the quantities of those varieties grown as well as the quantities of the other varieties that may be competing with that variety. To determine the reasonableness of price relations at any given time and to determine the future possibilities of the markets for any variety, one needs to have data as to quantities produced, or the quantities marketed, to use in the analysis of prices of that variety in relation to the prices of other varieties.

#### A basis for group effort in marketing

The preceding statements have been directed at the position of the individual grower who may market his fruit locally or distribute it widely. The individual grower cannot ordinarily affect significantly the quantity of apples flowing into a given market, but an organization of growers can do this. The individual grower can only decide to withhold his product when others are marketing too heavily. Whether or not it may pay to withhold, however, depends upon whether or not the buying power of consumers is such as to absorb the heavy flow and later pay higher prices. An organization of growers might be able to regulate the flow to market so as to avoid gluts and disastrously low prices; but it can do this only in the light of understanding of the purchasing power of the market, the rate at which the market can be fed, and the price level which will absorb the quantities to be fed into that market.

The Federal Surplus Commodity Corporation is in a position to use and must have price analysis as a basis for their operations. In the first place, the allotment of funds and the creation of an organization for handling a surplus should be made in advance of the actual movement of the crop. Those in charge of any program for handling crop surpluses need to determine - as early as possible in a season - whether or not the crop is likely to be so large that consumers will not absorb it except at disastrously low prices. They need to be in position to judge whether or not prices at the beginning of the season are lower than the size of the crop and the purchasing power of consumers warrant; and they need to know whether or not, if at all, the price is likely to fall below what might be considered a normal level for the season. Furthermore, from time to time during the season they need an appraisal of the market as to what is a reasonable price at the time in the light of the supplies remaining to be marketed within the season. All of this, of course, calls for price analysis with a look ahead. The development of this service is made with a view to serving producers, distributors, and the public generally, and aiding the Department of Agriculture in dealing with its problems, removing surpluses and of adjusting production to demand.