

# MILK PRODUCTION

May 12, 1964

Special in this issue  
CONCENTRATE RATIONS FED  
TO MILK COWS 1963, page 7

## SUMMARY

April milk production in the United States is estimated at 11,346 million pounds, 1 percent more than in April 1963 and a record high for the month. On a daily average basis the increase in production from March to April was 6 percent, the same seasonal gain as in 1963. Relative to population, production amounted to 1.97 pounds per person daily, compared with 1.98 pounds in April last year. Milk production per cow averaged 704 pounds in April, 5 percent above a year earlier for the second successive month.

Reported condition of dairy pastures on May 1 averaged 85 percent of normal for the United States. This is 5 points above this date a year ago, and equal to the 1958-62 average for the date. On May 1 pastures were in much better condition than a year earlier in most Southern States, as a result of abundant rainfall. In the West, spring pasture growth was slowed by cool weather during April.

Table 1.-Milk per cow and milk production by months, United States, 1964, with comparisons

Month	Milk per cow			Milk production			
	Average 1958-62	1963	1964	Average 1958-62	1963	1964	Change from 1963
	Pounds	Pounds	Pounds	Million pounds	Million pounds	Million pounds	Percent
January.....	549	599	620	9,867	10,065	10,066	0
February.....	526	565	608	9,421	9,470	9,842	+3.9
March.....	603	651	681	10,778	10,879	11,007	+1.2
April.....	622	672	704	11,088	11,196	11,346	+1.3
May.....	694	742		12,331	12,315		
June.....	671	715		11,901	11,841		
July.....	617	658		10,913	10,861		
August.....	573	615		10,114	10,130		
September....	536	582		9,450	9,558		
October.....	540	584		9,489	9,557		
November.....	516	564		9,054	9,205		
December.....	547	596		9,580	9,706		
Annual.....	6,995	7,545		123,986	124,783		

Table 2.-Monthly milk per cow and milk production,  
April 1964, with comparisons

State	Monthly milk per cow <sup>1/</sup>			Milk production			
	April av. 1958-62 <sup>2/</sup>	April 1963	April 1964	April av. 1958-62 <sup>2/</sup>	April 1963	April 1964	Change from 1963
	Pounds	Pounds	Pounds	Million pounds	Million pounds	Million pounds	Percent
Maine.....	-	720	750	-	66	67	+ 2
New Hampshire.....	-	735	765	-	37	37	0
Vermont.....	-	720	735	-	182	183	+ 1
Massachusetts.....	-	800	825	-	70	71	+ 1
Rhode Island.....	-	785	800	-	9.6	9.5	- 1
Connecticut.....	-	790	800	-	60	60	0
New York.....	750	812	833	941	996	989	- 1
New Jersey.....	789	860	869	102	101	99	- 2
Pennsylvania.....	682	750	770	604	641	634	- 1
Ohio.....	641	734	780	441	463	473	+ 2
Indiana.....	622	710	750	274	284	291	+ 2
Illinois.....	645	690	760	381	351	368	+ 5
Michigan.....	689	770	790	449	484	490	+ 1
Wisconsin.....	775	805	840	1,675	1,715	1,772	+ 3
Minnesota.....	787	800	865	1,010	1,014	1,086	+ 7
Iowa.....	612	645	690	532	515	523	+ 2
Missouri.....	485	520	530	325	320	309	- 3
North Dakota.....	558	605	630	159	155	155	0
South Dakota.....	506	500	540	129	116	121	+ 4
Nebraska.....	545	580	605	181	167	166	- 1
Kansas.....	507	525	550	174	161	162	+ 1
Delaware.....	-	690	705	-	16.6	16.2	- 2
Maryland.....	580	605	620	127	129	130	+ 1
Virginia.....	477	505	530	161	157	159	+ 1
West Virginia.....	423	418	440	56	47	48	+ 2
North Carolina.....	480	520	547	132	131	134	+ 2
South Carolina.....	430	465	490	49	47	46	- 2
Georgia.....	407	435	465	91	84	86	+ 2
Florida.....	572	660	670	108	117	119	+ 2
Kentucky.....	424	460	495	216	222	231	+ 4
Tennessee.....	388	410	410	195	197	188	- 5
Alabama.....	346	348	370	87	76	77	+ 1
Mississippi.....	308	330	350	116	102	100	- 2
Arkansas.....	348	385	405	80	75	71	- 5
Louisiana.....	-	380	410	-	84	87	+ 4
Oklahoma.....	500	560	560	132	122	113	- 7
Texas.....	448	508	550	265	267	274	+ 3
Montana.....	480	500	490	39	35	33	- 6
Idaho.....	707	742	710	143	142	135	- 5
Wyoming.....	508	525	535	15.6	13.9	13.6	- 2
Colorado.....	592	640	680	74	72	71	- 1
New Mexico.....	-	590	635	-	23	26	+ 13
Arizona.....	-	880	900	-	45	46	+ 2
Utah.....	696	730	730	66	66	64	- 3
Nevada.....	624	695	745	9.4	10.4	10.4	0
Washington.....	730	778	804	172	175	173	- 1
Oregon.....	660	690	695	107	101	97	- 4
California.....	850	899	915	698	719	719	0
Alaska.....	-	705	690	-	1.9	1.8	- 5
Hawaii.....	-	765	820	-	10.7	11.3	+ 6
United States.....	622	672	704	11,088	11,196	11,346	+ 1.3

<sup>1/</sup> Monthly rate based on all milk cows on farms (in milk or dry).

<sup>2/</sup> Five-year averages not available for States where not shown.

### Milk production continues 1 percent above a year earlier

April milk production in the United States is estimated at 11,346 million pounds, a record high for the month and 1 percent more than in April 1963. On a daily average basis, the increase in production from March to April was 6 percent, the same seasonal gain as in 1963. Relative to population, April production amounted to 1.97 pounds per person daily, compared with 1.98 pounds in April a year ago. For the first 4 months of this year, average daily milk production was about 1 percent more than in the corresponding period last year.

Milk production was above April 1963 in 25 States, with gains predominating in the Central and Southern States. Much better pasture feed than in April a year ago favored milk production in the South. Production fell short of a year earlier in the important dairy States of New York and Pennsylvania, also in many Western States where spring pasture growth has been slow.

### Milk production per cow 5 percent above April last year

Milk production per cow averaged 704 pounds in April. This is a gain of 5 percent from a year earlier and exceeds the April 1958-62 average by 13 percent. On a daily basis, production per cow increased 7 percent from March to April, the same as last year. The 5-year average March to April gain is 6 percent. Production per cow was at a record rate for the month in all but 3 States. Cows produced an average of 915 pounds of milk during April in California. This surpassed all other States and was followed by 900 pounds in Arizona, 869 pounds in New Jersey, 865 pounds in Minnesota, and 840 pounds in Wisconsin.

### April milk-feed price ratio 2 percent above a year ago

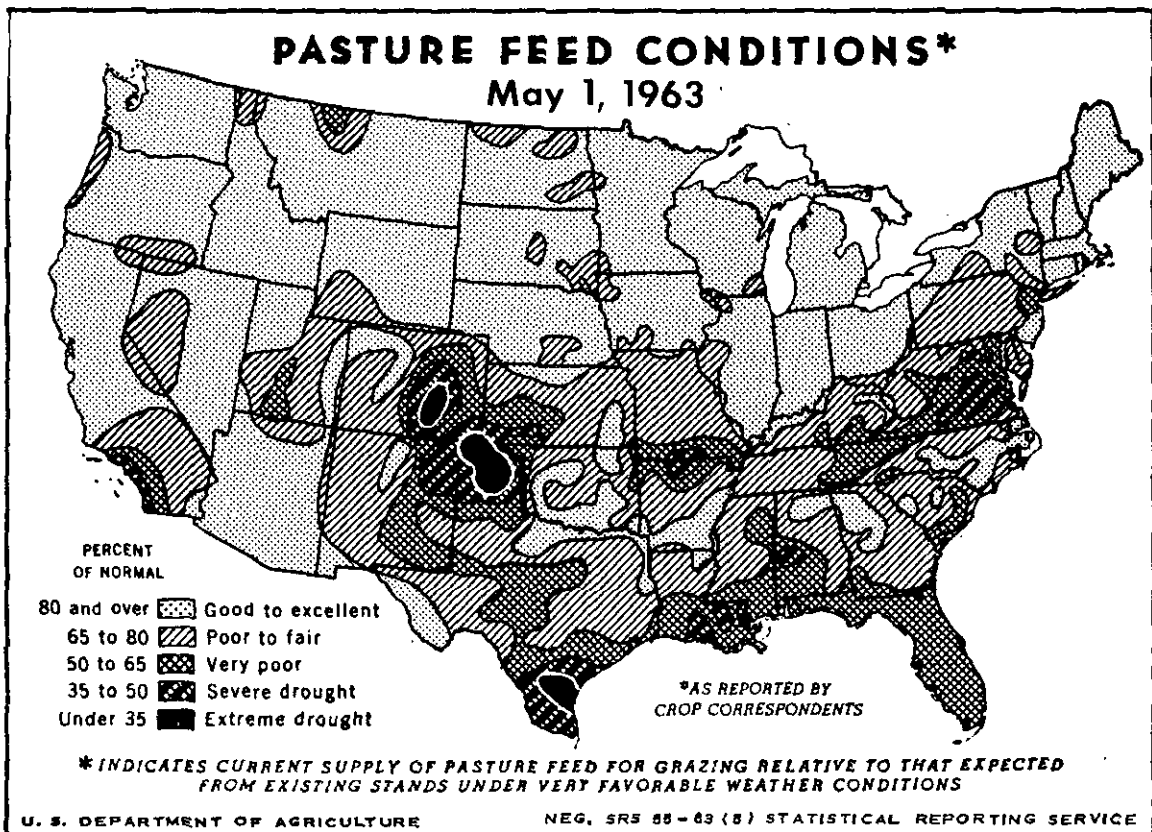
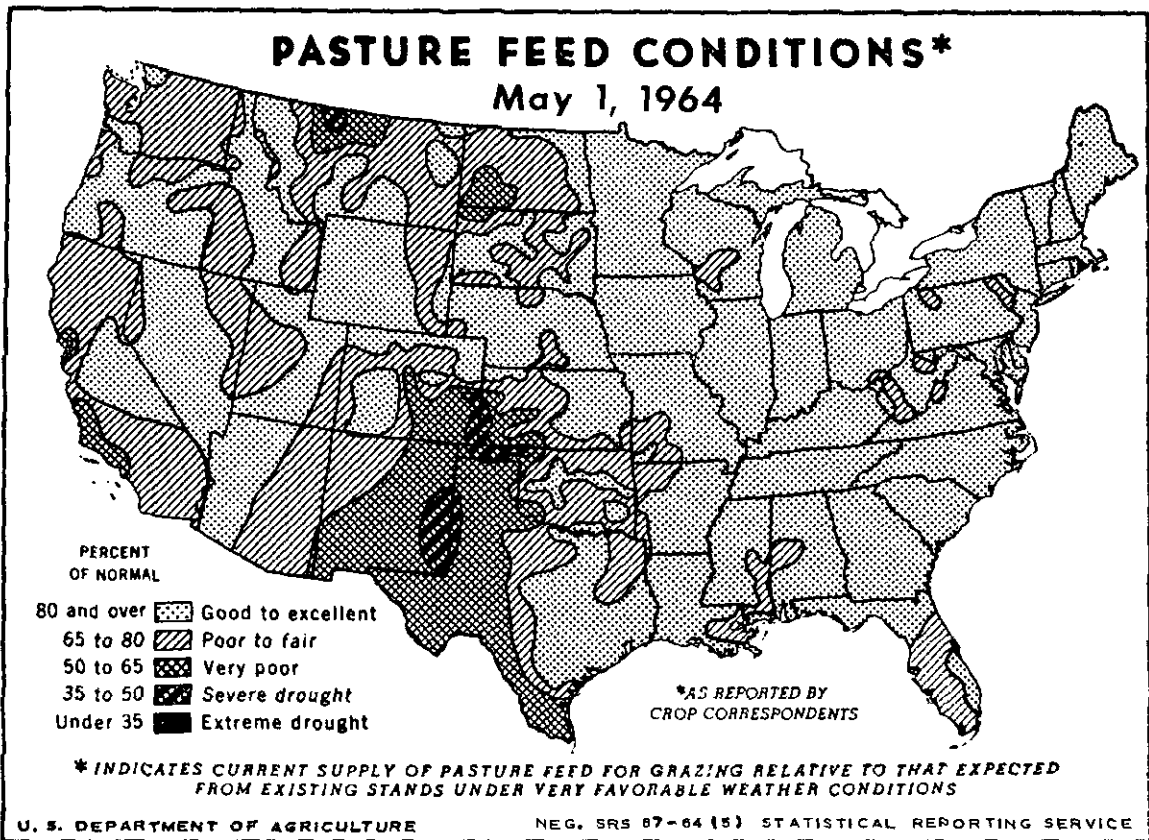
The April milk-feed price ratio, at 1.30, was 2 percent above April 1963 but 3 percent below the 1958-62 average for the month. Seasonally, the milk-feed price ratio was down 4 percent from March, compared with the average decline of 6 percent. In cream selling areas, the milkfat-feed price ratio for April was 22.8. This compares with 23.0 a year earlier and the April 1958-62 average of 24.7.

### Dairy pastures improve sharply during April

The Nation's pasture feed condition was rated good to excellent on May 1. This was a marked improvement during April, particularly in some areas where prospects for pastures were poor on April 1. Dairy pasture feed condition on May 1 for the United States averaged 85 percent of normal, compared with 80 percent on May 1 last year and the 1958-62 average for the date of 85 percent. Pasture condition advanced 13 percentage points during April as a result of favorable temperatures and generally adequate to abundant soil moisture. April temperatures averaged above normal in most of the eastern two-thirds of the country. Below normal temperatures prevailed in most of the Mountain and Pacific Coast States, and from New England, southward through Virginia. April rainfall was much heavier than normal in the central Gulf Coast States and in a large area centering in Illinois and extending into Iowa, Missouri and Indiana. By contrast, precipitation during April was less than one-half of normal in two general areas -- one including central and northern California and a large part of Oregon; another area in eastern New Mexico, southeastern Colorado, western Texas and the Panhandle, western Oklahoma and southwestern Kansas.

In the North Atlantic Region, dairy pasture feed condition was about average for May 1 and 9 percentage points more than a year earlier. In New England, snow cover was adequate during the winter to limit freezing damage. Although temperatures averaged below normal during April, growth was about normal. In Southern New England, cattle were receiving some feed from pastures by May 1. With near normal rainfall

Continued on page 5



and advancing temperatures in the Middle Atlantic States during April, pasture condition on May 1 was much improved from a year earlier, but about average for the date. Although pastures were generally too wet to be utilized in New York, dairymen were turning cattle on rye pastures in Pennsylvania, and in New Jersey pastures were being used earlier than usual because of low hay stocks which resulted from last years drought.

In the East North Central States pasture feed condition was reported good to excellent on May 1, although pastures were slow to develop after the extremely dry conditions last fall and the cool weather during March. Rains and warmer weather since mid April have stimulated pasture grasses. With the rather late start in development, pastures were supplying less than the average amount of feed for livestock by May 1. In Illinois, pastures furnished 40 percent of the roughage requirements compared with the average of 50 percent. Pasture feed condition in the West North Central States was much improved from April 1. During the mild open winter, pastures were over-grazed in many areas, and as a result, pasture grasses have been slow to develop. In Missouri, ample moisture and above normal temperatures during April helped the over-grazed pastures to improve rapidly. In Kansas, pastures are later than usual, but April rains in the northern and eastern portion of the State were beneficial to grasses. Pastures were slow to develop due to cool, dry conditions in Western Kansas. Farmers in this area utilized voluntary and over-planted wheat acreages, as well as some rye.

Table 3.-Dairy pasture feed condition, as percentage of normal, May 1, 1964, with comparisons <sup>1/</sup>

State and division	May 1, av. 1958-62	May 1, 1963	May 1, 1964	State and division	May 1, av. 1958-62	May 1, 1963	May 1, 1964
	Percent	Percent	Percent		Percent	Percent	Percent
Me. ....	92	90	89	N. C. ....	86	75	89
N. H. ....	90	87	90	S. C. ....	82	71	86
Vt. ....	92	88	88	Ga. ....	83	73	86
Mass. ....	91	85	92	Fla. ....	78	57	78
R. I. ....	87	80	89	S. Atl. ..	84	68	87
Conn. ....	93	79	91	Ky. ....	83	72	88
N. Y. ....	88	82	88	Tenn. ....	86	68	89
N. J. ....	84	64	88	Ala. ....	82	70	84
Pa. ....	86	75	86	Miss. ....	80	70	84
N. Atl. ....	87	79	88	Ark. ....	82	73	82
Ohio.....	86	86	89	La. ....	80	60	86
Ind. ....	87	90	90	Okla. ....	84	74	71
Ill. ....	88	85	89	Tex. ....	80	64	73
Mich. ....	92	88	93	S. Cent. .	82	69	80
Wis. ....	86	90	86	Mont. ....	77	87	77
E. N. Cent. .	87	88	89	Idaho.....	89	86	79
Minn. ....	83	88	88	Wyo. ....	83	79	83
Iowa.....	89	85	88	Colo. ....	84	61	75
Mo. ....	84	68	84	N. Mex. ....	81	65	53
N. Dak. ....	65	83	74	Ariz. ....	86	86	79
S. Dak. ....	74	85	82	Utah.....	85	79	80
Nebr. ....	86	85	86	Nev. ....	80	78	79
Kans. ....	87	70	78	Wash. ....	88	87	79
W. N. Cent. .	85	81	85	Oreg. ....	90	85	81
Del. ....	87	66	90	Calif. ....	80	86	73
Md. ....	85	73	89	West. ....	84	83	76
Va. ....	85	56	89	U. S. ....	85	80	85
W. Va. ....	79	69	83				

<sup>1/</sup> Indicates current supply of feed for grazing relative to that expected from existing stands under very favorable weather conditions. U. S. averages differ from those published in Crop Production in that States are combined with dairy rather than all livestock weights.

The excellent pasture condition in the South Atlantic States on May 1 is in contrast to a rather poor start as of April 1 and the very poor condition of May 1 a year ago. All States, except Florida, showed improvement from a month earlier and were above the 5-year average condition for May 1. In all States in this region May 1 pasture condition was 13 or more percentage points better than a year earlier. In Virginia, where severe drought persisted in 1963, May 1 pasture feed condition was up 33 points from a year earlier, and dairy cattle were getting adequate to abundant green feed from pastures.

In most South Central States, pasture conditions improved sharply during April, and were above May 1 last year. In most of this region, pastures responded to April showers and above-normal temperatures to produce a heavy growth. In Oklahoma, pastures developed slowly but were providing considerable feed by end of April. More rain is needed to assure future pasture development. Range and pasture feed condition is good in the eastern half of Texas but northwest and south Texas ranges need rain.

Generally in the Western States, pasture feed conditions did not improve during April and were below May 1 last year and the average for the date. Below normal temperatures in April limited pasture growth. Also more rain is needed in Colorado, New Mexico, Arizona, and California to improve dryland pastures. Pasture development in Washington was from 1 to 3 weeks late due to cool weather and excessive rainfall in western counties. Supplemental feeding of dairy stock was necessary through April. Irrigated pastures were in good condition in California and Arizona; however, irrigation water supplies will not be plentiful in Colorado and will limit the irrigated pasture acreage.

Table 4.-Average milk price received by farmers and value of concentration ration fed to milk cows, by regions, April 1964, with comparisons

Region	Milk price per 100 pounds				Ration value per 100 pounds			
	Apr. av. 1958-62	Apr. 1963	Mar. 1964	Apr. 1964	Apr. av. 1958-62	Apr. 1963	Mar. 1964	Apr. 1964
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
N. Atl. ....	4.34	4.19	4.60	4.29	3.57	3.62	3.54	3.51
E. N. Cent. ..	3.54	3.51	3.69	3.56	2.68	2.74	2.79	2.80
W. N. Cent. ..	3.28	3.28	3.40	3.31	2.28	2.45	2.47	2.50
S. Atl. ....	5.33	5.13	5.43	5.13	3.33	3.42	3.43	3.41
S. Cent. ....	4.38	4.32	4.73	4.39	3.06	3.15	3.16	3.19
West. ....	4.19	4.21	4.36	4.24	3.12	3.14	3.20	3.20
U. S.								
Milk areas....	3.94	3.88	4.12	3.93	2.94	3.02	3.03	3.03
Cream areas...	-	-	-	-	2.43	2.54	2.54	2.57
Milk and cream areas.....	-	-	-	-	2.90	3.00	3.01	3.01

Table 5.-Milk-feed and milkfat-feed price ratio, by regions, April 1964, with comparisons

Region	Milk-feed ratio 1/				Milkfat-feed ratio 2/			
	Apr. Av. 1958-62	Apr. 1963	Mar. 1964	Apr. 1964	Apr. av. 1958-62	Apr. 1963	Mar. 1964	Apr. 1964
N. Atl. ....	1.22	1.16	1.30	1.22	-	-	-	-
E. N. Cent. ..	1.32	1.28	1.32	1.27	20.7	20.3	19.5	19.6
W. N. Cent. ..	1.44	1.34	1.38	1.32	26.9	24.2	24.2	23.8
S. Atl. ....	1.60	1.50	1.58	1.50	-	-	-	-
S. Cent. ....	1.43	1.37	1.50	1.38	16.6	16.1	16.4	16.2
West. ....	1.34	1.34	1.36	1.32	18.9	18.7	18.0	18.1
U. S. ....	1.34	1.28	1.36	1.30	24.7	23.0	23.1	22.8

1/ Pounds of concentrate ration equal in value to 1 pound of whole milk sold by farmers.

2/ Pounds of concentrate ration equal in value to 1 pound of milkfat in cream sold by farmers.

GRAIN AND OTHER CONCENTRATES FED TO MILK COWS, 1963

Milk cows in the United States were fed nearly 22 million tons of grain and other concentrates in 1963, according to the Crop Reporting Board. Of the estimated total quantity, 97 percent was fed on farms from which milk or cream was sold. The remainder, 3 percent, was fed on farms where milk was produced for home use only. In the East North Central States, 6 million tons of grain and concentrates were fed in 1963, accounting for 28 percent of the United States total. Nearly 5 million tons were fed in the West North Central Region and 4 million in the North Atlantic. Milk cows consumed 3 million tons in the South Central Region and 2 million in both the South Atlantic and Western Regions. Wisconsin led all States in the quantity of grain and concentrates fed to milk cows -- followed by New York, Minnesota, Pennsylvania, and California. These States account for 40 percent of the total grain and concentrates fed to milk cows in the United States.

Grain and concentrates fed per cow up 4 percent in 1963

In 1963, dairymen fed grain and concentrates at an average annual rate of 2,646 pounds per cow. This is 4 percent more than the 2,533 pounds per cow fed in 1962. Milk cows in the North Atlantic Region received an average of 3,003 pounds of grain and concentrates in 1963 -- more than any other region. The 5,220 pounds of grain and concentrates fed per cow in Florida in 1963 topped the feeding rates in all other States; New Jersey ranked second with 3,490 pounds, followed by Connecticut with 3,290 pounds, Massachusetts and Ohio each with 3,170 pounds and Rhode Island and Michigan each with 3,140 pounds.

Continued on page 9

Table 6.-Quantity and value of concentrates fed per 100 pounds of milk produced on farms where milk or cream was sold, United States, by months, 1957-61 average, 1962 and 1963 <sup>1/</sup>

Month	Concentrates fed per 100 pounds of milk			Value per 100 pounds of concentrate ration			Value of concentrates fed per 100 pounds milk produced		
	Average 1957-61	1962	1963	Average 1957-61	1962	1963	Average 1957-61	1962	1963
	Lb.	Lb.	Lb.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Jan. ....	37	38	39	2.92	2.92	3.02	1.08	1.11	1.18
Feb. ....	36	38	39	2.94	2.91	3.03	1.06	1.11	1.18
Mar. ....	35	37	38	2.93	2.91	3.03	1.03	1.08	1.15
Apr. ....	34	36	36	2.93	2.92	3.00	1.00	1.05	1.08
May.....	29	32	33	2.93	2.92	2.99	.85	.93	.99
June.....	24	27	28	2.93	2.91	3.00	.70	.79	.84
July.....	26	30	31	2.94	2.92	3.01	.76	.88	.93
Aug. ....	29	32	33	2.93	2.91	3.02	.85	.93	1.00
Sept. ....	31	34	34	2.90	2.92	3.03	.90	.99	1.03
Oct. ....	33	35	36	2.85	2.92	3.02	.94	1.02	1.09
Nov. ....	36	37	38	2.84	2.94	3.00	1.02	1.09	1.14
Dec. ....	37	38	39	2.86	2.98	3.02	1.06	1.13	1.18
Year av. ..	31.9	34.3	35.1	2.91	2.92	3.01	.93	1.00	1.06

<sup>1/</sup> "Concentrates" as used here include the grains and other concentrates that make up the concentrate ration fed to milk cows.

Table 7.-Grain and other concentrates fed to milk cows on farms where milk or cream was sold and on farms where milk was produced for home use only, by States, 1963

State and division	On farms where milk or cream was sold			On farms where milk was produced for home use only		On all farms where milk was produced	
	Fed per 100 pounds milk	Fed per cow	Total fed	Fed per cow	Total fed	Fed per cow	Total fed
	Pounds	Pounds	1,000 tons	Pounds	1,000 tons	Pounds	1,000 tons
Me. ....	35	3,070	132	1,900	4	3,020	136
N. H. ....	34	2,840	69	1,790	1	2,820	70
Vt. ....	35	2,800	352	1,670	1	2,800	353
Mass. ....	34	3,190	137	1,820	1	3,170	138
R. I. ....	35	3,180	19	1,730	-	3,140	19
Conn. ....	35	3,300	124	1,910	1	3,290	125
N. Y. ....	33	2,920	1,764	1,690	7	2,910	1,771
N. J. ....	36	3,500	203	1,860	1	3,490	204
Pa. ....	37	3,120	1,296	1,820	16	3,090	1,312
N. Atl. ....	34.7	3,018	4,096	1,829	32	3,003	4,128
Ohio.....	37	3,200	973	1,980	18	3,170	991
Ind. ....	37	3,110	597	1,940	14	3,070	611
Ill. ....	35	2,890	703	1,710	15	2,850	718
Mich. ....	35	3,160	974	1,890	10	3,140	984
Wis. ....	31	2,680	2,842	1,520	4	2,680	2,846
E. N. Cent. ..	33.4	2,889	6,089	1,848	61	2,872	6,150
Minn. ....	33	2,680	1,683	1,750	7	2,670	1,690
Iowa.....	36	2,690	1,034	1,800	19	2,670	1,053
Mo. ....	39	2,310	660	1,550	28	2,260	688
N. Dak. ....	33	2,150	268	1,420	4	2,130	272
S. Dak. ....	34	1,990	221	1,300	5	1,970	226
Nebr. ....	33	2,110	290	1,440	7	2,080	297
Kans. ....	36	2,210	320	1,490	11	2,170	331
W. N. Cent. ..	34.7	2,465	4,476	1,567	81	2,440	4,557
Del. ....	39	2,970	34	1,660	1	2,920	35
Md. ....	39	2,910	299	1,600	5	2,870	304
Va. ....	38	2,440	335	1,390	24	2,320	359
W. Va. ....	34	1,810	90	1,140	7	1,730	97
N. C. ....	40	2,620	273	1,590	33	2,450	306
S. C. ....	45	2,530	101	1,550	15	2,330	116
Ga. ....	48	2,560	197	1,520	30	2,350	227
Fla. ....	70	5,320	457	1,890	5	5,220	462
S. Atl. ....	45.0	2,937	1,786	1,497	120	2,768	1,906
Ky. ....	40	2,290	489	1,380	36	2,190	525
Tenn. ....	42	2,050	429	1,310	38	1,960	467
Ala. ....	53	2,410	198	1,490	38	2,190	236
Miss. ....	50	2,030	247	1,270	38	1,880	285
Ark. ....	49	2,280	182	1,400	22	2,140	204
La. ....	48	2,200	190	1,280	30	2,010	220
Okla. ....	47	3,080	288	1,860	24	2,930	312
Tex. ....	49	2,940	648	1,780	70	2,770	718
S. Cent. ....	46.0	2,414	2,671	1,463	296	2,267	2,967
Mont. ....	29	1,790	58	1,090	3	1,740	61
Idaho.....	23	1,940	180	1,110	4	1,920	184
Wyo. ....	24	1,660	19	990	2	1,580	21
Colo. ....	31	2,400	124	1,540	6	2,330	130
N. Mex. ....	31	2,170	40	1,310	2	2,100	42
Ariz. ....	27	2,680	65	1,380	2	2,630	67
Utah.....	26	2,210	94	1,280	3	2,160	97
Nev. ....	22	1,840	13	980	1	1,800	14
Wash. ....	28	2,560	267	1,420	9	2,490	276
Oreg. ....	27	1,990	136	1,170	4	1,940	140
Calif. ....	27	2,820	1,111	1,480	7	2,800	1,118
West. ....	26.9	2,488	2,107	1,308	43	2,444	2,150
U. S. ....	35.1	2,706	21,225	1,516	633	2,646	21,858



(Continued from page 7)

Ratio of concentrates to milk advances 2 percent in 1963

Farmers selling milk or cream fed 35.1 pounds of grain and concentrates per hundredweight of milk produced in 1963. This is a 2-percent gain from the 34.3 pounds fed in 1962 and compares with the 1957-61 average of 31.9 pounds. The ratio follows a consistent seasonal pattern -- with smaller quantities of grain and concentrates fed per hundredweight when milk production reaches its seasonal peak. By regions, dairymen in the West fed 26.9 pounds of grain and concentrates per hundred pounds of milk produced in 1963 -- less than in any other region. By contrast, the feeding ratio was the highest in the South Central Region, where 46.0 pounds of grain and concentrates were fed per hundredweight of milk produced.

Value of grain and concentrates fed -- 3 percent higher in 1963

In 1963, the average value of grain and concentrates fed to milk cows was \$3.01 per hundredweight. This compares with \$2.92 in 1962 and the 1957-61 average of \$2.91. During 1963, the monthly values ranged from \$2.99 to \$3.03 per hundredweight. By regions, the annual average per hundredweight varied from \$3.62 in the North Atlantic to \$2.45 in the West North Central. The value of concentrate ration per hundredweight by States ranged from \$3.97 in Maine to \$1.75 in North Dakota.

The value of grain and concentrates fed for each hundred pounds of milk produced averaged \$1.06 in 1963, compared with \$1.00 in 1962 and 93 cents, the 5-year average. During 1963, the monthly averages ranged from 84 cents to \$1.18 per hundredweight.

Corn ranks first, as feed ingredient

In 1963, corn represented 38 percent of the total concentrate ration fed to milk cows -- a larger portion of the ration than any other ingredient. Commercial mixed feeds and supplements made up 32 percent of the ration, oats 16 percent and barley 3 percent. Sorghum, soybeans or soybean meal, and wheat bran and middlings each represented about 2 percent of the ration. More than one-half of the grain and concentrate ration fed to milk cows in the East North Central and West North Central Regions was corn. Corn represented one-third of the ration in the South Atlantic and South Central Regions, but accounted for only 4.3 percent of the ration in the West and 19 percent in the North Atlantic Region. Commercial mixed feeds and supplements were the most important kind of concentrate fed in 4 regions, accounting for 64 percent in the West, 60 percent of the ration in the North Atlantic, 41 percent in the South Central, and 37 percent in the South Atlantic. In the East North Central and West North Central Regions, the oats portion of the ration was 26 and 23 percent, respectively. Sorghum grain represented more than 10 percent of the concentrate ration fed in Nebraska, Kansas, Oklahoma, Texas, New Mexico, and Arizona. Cotton seed meal, wheat bran, and shorts were important feed ingredients in the South Central Region.

Home-grown feed declines as percent of concentrate ration

Home-grown feeds were 45 percent of the concentrate ration fed to milk cows in 1963, compared with 47 percent in 1962. In the North Central Regions, 69 percent of the grains and concentrates were home-grown, compared with 23 percent in the North Atlantic, 28 percent in the South Atlantic, 26 percent in the South Central, and 9 percent in the Western. Corn, the most frequently used feed in the dairy ration is also largely a home-grown ingredient. In 1963 about 77 percent of the corn fed was home-grown, compared with 81 percent in 1962. The proportion of oats home-grown was also large -- 84 percent in 1963, compared with 86 percent in 1962.

Milk-feed price ratio declines 3 percent in 1963

The annual average milk-feed price ratio was 1.36 in 1963 -- down 3 percent from 1.40 in 1962. By regions, the annual averages were all below the level of a year earlier. During 1963, the monthly average was below the same month a year earlier from January through October. However, the ratio in November was unchanged from the same month in 1962 and in December moved to a level above 1962. In areas producing farm separated cream, the milkfat-feed price ratio averaged 23.0 in 1963, compared with 24.3 in 1962.

Table 8.-Individual feeds as percentage of the total concentrate ration fed to milk cows in herds kept by dairy reports, by States, 1963 1/

State and division	Grains					Oil seeds and oil-seed meals			Wheat bran, shorts	Dried beet pulp	Dried citrus pulp	Commercial mixed feeds	Misc. other
	Corn	Oats	Barley	Wheat	Sorghum	Cotton-seed meal	Cotton seed	Soybeans or S. B. meal					
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	
Me. ....	-	-	-	-	-	-	-	-	-	-	95	5	
N. H. ....	-	-	-	-	-	-	-	-	-	2	95	3	
Vt. ....	1	-	-	-	-	-	-	-	-	1	97	1	
Mass. ....	-	-	-	-	-	-	-	-	-	7	91	2	
R. I. ....	-	-	-	-	-	-	-	-	5	8	85	2	
Conn. ....	3	-	-	-	-	-	-	-	3	2	86	6	
N. Y. ....	15	11	1	-	-	-	-	1	1	-	66	5	
N. J. ....	19	4	4	1	-	-	-	2	1	2	60	7	
Pa. ....	35	16	3	-	-	-	-	3	2	1	31	9	
N. Atl. ...	18.7	10.0	1.6	-	-	-	-	1.5	1.1	0.5	0.5	60.2	5.9
Ohio. ....	63	18	1	-	-	-	-	5	2	-	-	9	2
Ind. ....	68	13	1	-	-	-	-	4	1	-	-	12	1
Ill. ....	66	19	1	-	-	-	-	3	1	-	-	9	1
Mich. ....	58	28	2	-	-	-	-	4	-	-	-	6	2
Wis. ....	47	33	-	-	-	-	-	2	4	1	-	9	4
E.N. Cent.	55.6	26.2	0.7	-	-	-	-	3.1	2.4	0.5	-	8.8	2.7
Minn. ....	57	31	1	-	-	-	-	2	1	1	-	7	-
Iowa. ....	74	15	-	-	-	-	-	2	1	-	-	8	-
Mo. ....	41	3	1	-	1	2	-	2	6	-	-	42	2
N. Dak. ....	9	70	16	1	-	-	-	1	-	-	-	2	1
S. Dak. ....	39	47	6	-	1	-	-	1	-	-	-	3	3
Nebr. ....	60	7	2	-	13	-	-	1	1	1	-	14	1
Kans. ....	23	6	5	-	38	-	-	6	6	-	-	15	1
W.N. Cent.	52.6	22.9	2.3	0.1	3.8	0.3	-	2.1	2.0	0.4	-	12.9	0.6
Del. ....	46	6	5	-	-	-	-	2	1	-	3	28	9
Md. ....	40	12	8	-	-	1	-	4	3	-	1	25	6
Va. ....	47	5	5	-	-	1	1	2	5	-	-	30	4
W. Va. ....	31	7	5	-	-	1	-	1	1	-	-	53	1
N. C. ....	32	4	4	-	-	2	1	4	3	-	-	49	1
S. C. ....	34	6	-	-	-	6	2	1	1	-	4	45	1
Ga. ....	26	4	-	-	-	3	2	1	1	-	5	56	2
Fla. ....	23	9	-	-	-	-	-	5	1	-	17	31	14
S. Atl. ...	33.5	7.1	3.2	-	-	1.4	0.7	3.2	2.4	-	5.3	37.2	6.0
Ky. ....	70	2	1	-	-	-	-	3	1	-	-	21	2
Tenn. ....	53	4	1	-	1	4	-	1	2	-	-	33	1
Ala. ....	43	4	-	-	-	7	1	2	1	-	-	41	1
Miss. ....	38	4	-	-	-	9	2	1	1	-	-	39	6
Ark. ....	15	3	-	-	2	3	-	2	8	-	-	65	2
La. ....	20	2	-	-	-	3	1	1	3	-	-	66	4
Okla. ....	6	7	7	-	21	4	1	-	10	-	-	41	3
Tex. ....	9	3	1	-	21	8	-	-	6	-	1	48	3
S. Cent. ...	33.3	3.5	1.3	-	7.7	4.8	0.4	1.2	4.0	-	0.2	41.0	2.6
Mont. ....	-	18	44	3	-	-	-	-	2	5	-	22	6
Idaho. ....	3	15	28	5	-	-	-	-	2	7	-	26	14
Wyo. ....	-	22	44	-	-	-	-	-	-	2	-	25	7
Colo. ....	20	10	12	-	4	-	-	-	1	2	-	45	6
N. Mex. ....	8	5	7	-	33	-	-	-	7	1	-	22	17
Ariz. ....	4	-	12	-	15	-	-	-	2	1	-	60	6
Utah. ....	3	3	42	2	2	-	-	-	3	9	-	34	2
Nev. ....	-	-	27	-	4	-	-	-	-	-	-	69	-
Wash. ....	3	3	4	-	-	-	-	-	3	3	-	79	5
Oreg. ....	-	4	7	1	-	-	-	-	3	2	-	82	1
Calif. ....	4	2	8	1	1	-	-	-	1	2	-	73	8
West. ....	4.3	4.5	12.4	1.2	2.0	-	-	-	1.7	2.9	-	63.7	7.3
U. S. ....	38.1	15.8	2.7	0.1	1.9	0.8	0.1	2.0	2.2	0.6	0.6	31.5	3.6

1/ Based on reports of rations fed on May 1 and November 1.

Table 9.-Home-grown feeds as percentage of total of that kind used in the concentrate ration fed to milk cows kept by dairy reporters, by States, 1962 and 1963 <sup>1/</sup>

State and division	Total concentrate ration		Corn		Oats		Barley	
	1962	1963	1962	1963	1962	1963	1962	1963
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Me. ....	1	a/	-	-	80	-	-	-
N. H. ....	a/	a/	-	-	-	-	-	-
Vt. ....	a/	a/	-	a/	-	-	-	-
Mass. ....	a/	a/	10	-	-	-	-	-
R. I. ....	a/	a/	-	-	-	-	-	-
Conn. ....	a/	a/	5	15	a/	-	-	-
N. Y. ....	18	18	76	52	91	84	87	78
N. J. ....	27	23	92	80	65	73	86	90
Pa. ....	50	44	88	75	87	85	90	92
N. Atl. ....	25.1	22.7	85.1	66.7	88.2	84.3	88.5	87.9
Ohio. ....	72	69	87	82	91	89	78	93
Ind. ....	71	70	86	84	84	83	-	98
Ill. ....	79	79	92	92	91	88	-	78
Mich. ....	77	77	84	84	93	91	72	68
Wis. ....	67	64	79	75	89	86	57	-
E. N. Cent. ....	71.3	69.0	84.0	81.2	89.8	87.2	64.3	79.9
Minn. ....	77	79	89	87	91	90	93	86
Iowa. ....	79	80	89	90	85	84	-	-
Mo. ....	35	34	73	70	71	83	90	78
N. Dak. ....	72	86	65	79	79	91	65	88
S. Dak. ....	76	72	75	73	87	76	41	71
Nebr. ....	65	65	78	79	75	79	60	52
Kans. ....	52	50	80	68	70	58	75	49
W. N. Cent. ....	68.3	69.4	85.3	84.2	85.9	86.9	71.6	76.4
Del. ....	60	51	94	88	92	83	100	73
Md. ....	60	44	88	70	74	70	82	79
Va. ....	47	40	80	67	85	72	90	90
W. Va. ....	26	24	62	52	59	54	70	85
N. C. ....	31	22	70	50	80	41	61	67
S. C. ....	34	30	68	73	85	73	90	-
Ga. ....	16	18	52	59	64	54	38	-
Fla. ....	2	16	15	50	-	45	-	-
S. Atl. ....	29.8	28.2	69.4	61.6	76.8	58.3	80.1	80.1
Ky. ....	53	59	82	78	65	78	89	83
Tenn. ....	41	41	67	68	81	73	-	67
Ala. ....	39	24	72	50	60	42	-	-
Miss. ....	47	33	78	69	55	66	-	-
Ark. ....	8	9	48	45	52	62	-	-
La. ....	7	7	40	29	30	40	-	-
Okla. ....	16	13	40	47	59	38	41	28
Tex. ....	6	5	40	29	28	19	20	38
S. Cent. ....	27.7	25.7	70.2	64.9	53.4	49.3	43.8	42.3
Mont. ....	34	27	80	-	70	55	45	36
Idaho. ....	46	37	75	86	87	70	67	47
Wyo. ....	37	34	60	-	55	52	54	50
Colo. ....	27	23	48	50	58	63	48	45
N. Mex. ....	10	10	45	55	20	2	30	19
Ariz. ....	4	12	a/	50	a/	-	35	33
Utah. ....	31	28	20	30	80	69	68	57
Nev. ....	11	18	-	-	-	-	64	65
Wash. ....	3	3	18	5	45	55	35	27
Oreg. ....	9	7	67	-	64	65	37	47
Calif. ....	2	1	10	6	10	11	16	6
West. ....	10.3	8.9	29.7	26.3	57.1	49.6	44.5	32.2
U. S. ....	46.7	45.3	81.4	76.8	85.8	83.5	61.7	55.7

<sup>1/</sup> Percentages shown are based on reports of rations fed on May 1 and November 1. For corn, oats, and barley, figures are shown only for States where that kind of grain was reported in milk cow rations. a/ Less than .5 of 1 percent.

Table 10.-Estimated value per 100 pounds of concentrate rations fed to milk cows, by States and months, 1963 1/

State and division	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Me. ....	4.10	4.05	3.96	3.90	3.90	3.91	3.92	3.94	3.96	3.99	4.01	4.02	3.97
N. H. ....	3.99	3.95	3.90	3.88	3.90	3.91	3.92	3.95	3.97	4.01	3.99	3.97	3.94
Vt. ....	3.89	3.93	3.88	3.84	3.81	3.79	3.77	3.81	3.86	3.90	3.89	3.88	3.85
Mass. ....	3.95	3.92	3.86	3.81	3.81	3.82	3.83	3.85	3.87	3.89	3.89	3.89	3.87
R. I. ....	3.90	3.90	3.85	3.80	3.84	3.88	3.92	3.90	3.88	3.85	3.85	3.85	3.87
Conn. ....	3.96	4.02	3.94	3.86	3.81	3.83	3.85	3.88	3.95	4.01	4.01	4.00	3.93
N. Y. ....	3.68	3.66	3.63	3.59	3.58	3.56	3.55	3.58	3.62	3.64	3.64	3.66	3.62
N. J. ....	3.74	3.73	3.73	3.71	3.69	3.68	3.67	3.73	3.74	3.76	3.72	3.68	3.72
Pa. ....	3.43	3.45	3.44	3.42	3.42	3.41	3.42	3.44	3.47	3.48	3.46	3.46	3.44
N. Atl. ....	3.65	3.68	3.68	3.62	3.59	3.58	3.57	3.58	3.62	3.65	3.62	3.64	3.62
Ohio.....	2.80	2.85	2.85	2.84	2.84	2.87	2.90	2.93	2.93	2.86	2.83	2.87	2.86
Ind. ....	2.95	2.90	2.86	2.82	2.80	2.84	2.87	2.88	2.90	2.86	2.83	2.86	2.86
Ill. ....	2.50	2.52	2.51	2.51	2.52	2.54	2.56	2.58	2.60	2.55	2.52	2.55	2.54
Mich. ....	2.87	2.89	2.89	2.90	2.92	2.94	2.97	2.94	2.92	2.88	2.84	2.88	2.90
Wis. ....	2.75	2.76	2.77	2.75	2.73	2.75	2.76	2.77	2.78	2.78	2.78	2.79	2.76
E. N. Cent. .	2.78	2.79	2.79	2.74	2.74	2.75	2.77	2.80	2.82	2.80	2.77	2.80	2.78
Minn. ....	2.54	2.56	2.56	2.56	2.56	2.57	2.58	2.56	2.54	2.52	2.47	2.54	2.55
Iowa.....	2.32	2.32	2.33	2.33	2.32	2.30	2.29	2.30	2.32	2.28	2.24	2.30	2.30
Mo. ....	2.81	2.82	2.83	2.81	2.81	2.82	2.85	2.82	2.80	2.76	2.78	2.80	2.81
N. Dak. ....	1.82	1.86	1.83	1.81	1.79	1.78	1.74	1.70	1.66	1.63	1.66	1.68	1.75
S. Dak. ....	2.10	2.10	2.08	2.08	2.07	2.07	2.07	2.04	2.02	2.00	2.02	2.04	2.06
Nebr. ....	2.20	2.22	2.24	2.26	2.28	2.31	2.34	2.32	2.28	2.24	2.20	2.24	2.26
Kans. ....	2.56	2.56	2.54	2.50	2.46	2.46	2.50	2.48	2.46	2.44	2.46	2.48	2.49
W. N. Cent. .	2.46	2.48	2.48	2.45	2.43	2.45	2.47	2.44	2.46	2.42	2.39	2.42	2.45
Del. ....	3.53	3.48	3.44	3.40	3.40	3.44	3.48	3.44	3.38	3.34	3.34	3.38	3.42
Md. ....	3.52	3.49	3.46	3.44	3.44	3.48	3.52	3.48	3.42	3.38	3.38	3.42	3.45
Va. ....	3.51	3.52	3.54	3.56	3.56	3.58	3.60	3.60	3.52	3.48	3.48	3.52	3.54
W. Va. ....	3.91	3.93	3.90	3.88	3.84	3.86	3.86	3.88	3.92	3.98	3.92	3.96	3.90
N. C. ....	3.53	3.52	3.51	3.50	3.50	3.52	3.54	3.58	3.54	3.48	3.42	3.40	3.50
S. C. ....	3.38	3.42	3.44	3.47	3.47	3.47	3.46	3.44	3.42	3.38	3.38	3.40	3.43
Ga. ....	3.38	3.38	3.39	3.39	3.39	3.41	3.44	3.42	3.38	3.38	3.38	3.42	3.40
Fla. ....	2.96	3.04	3.12	3.20	3.22	3.24	3.26	3.24	3.16	3.10	3.12	3.16	3.15
S. Atl. ....	3.38	3.40	3.42	3.42	3.42	3.46	3.48	3.50	3.46	3.43	3.39	3.41	3.43
Ky. ....	3.24	3.26	3.26	3.26	3.28	3.31	3.34	3.30	3.28	3.25	3.20	3.24	3.27
Tenn. ....	3.17	3.17	3.16	3.14	3.14	3.14	3.15	3.12	3.08	3.04	3.08	3.12	3.13
Ala. ....	3.06	3.09	3.12	3.09	3.06	3.09	3.13	3.13	3.11	3.09	3.09	3.11	3.10
Miss. ....	3.15	3.19	3.19	3.20	3.20	3.22	3.23	3.22	3.19	3.16	3.12	3.08	3.18
Ark. ....	3.12	3.15	3.18	3.14	3.09	3.11	3.12	3.14	3.14	3.14	3.15	3.16	3.14
La. ....	3.42	3.44	3.44	3.42	3.41	3.43	3.42	3.38	3.42	3.44	3.47	3.45	3.43
Okla. ....	2.97	2.97	2.95	2.93	2.91	2.93	2.95	2.93	2.91	2.90	2.90	2.92	2.93
Tex. ....	3.06	3.08	3.08	3.06	3.06	3.08	3.11	3.12	3.13	3.14	3.18	3.20	3.11
S. Cent. ....	3.14	3.16	3.17	3.15	3.13	3.16	3.17	3.18	3.18	3.17	3.18	3.18	3.16
Mont. ....	2.43	2.43	2.40	2.39	2.39	2.37	2.36	2.32	2.28	2.30	2.34	2.34	2.36
Idaho.....	2.82	2.80	2.78	2.75	2.75	2.74	2.70	2.64	2.60	2.62	2.64	2.66	2.71
Wyo. ....	2.65	2.63	2.62	2.62	2.60	2.58	2.56	2.54	2.52	2.50	2.48	2.52	2.57
Colo. ....	2.80	2.82	2.83	2.84	2.84	2.84	2.86	2.83	2.80	2.86	2.80	2.86	2.83
N. Mex. ....	3.30	3.30	3.28	3.26	3.24	3.22	3.20	3.20	3.24	3.28	3.32	3.36	3.27
Ariz. ....	3.60	3.64	3.68	3.70	3.74	3.72	3.72	3.74	3.78	3.80	3.78	3.76	3.72
Utah.....	2.96	2.98	2.96	2.94	2.94	2.94	2.94	2.94	2.90	2.86	2.88	2.92	2.93
Nev. ....	3.26	3.28	3.28	3.36	3.32	3.24	3.32	3.40	3.40	3.39	3.40	3.40	3.34
Wash. ....	3.36	3.36	3.34	3.32	3.30	3.28	3.28	3.26	3.28	3.32	3.36	3.36	3.32
Oreg. ....	3.26	3.26	3.28	3.24	3.20	3.24	3.20	3.15	3.16	3.16	3.18	3.22	3.21
Calif. ....	3.27	3.30	3.30	3.28	3.26	3.26	3.27	3.28	3.24	3.33	3.33	3.32	3.29
West. ....	3.19	3.20	3.17	3.14	3.16	3.18	3.20	3.18	3.16	3.20	3.22	3.24	3.19
U. S.:													
Milk areas 2/	3.04	3.06	3.06	3.02	3.01	3.02	3.04	3.04	3.05	3.05	3.03	3.05	3.04
Cream areas 2/	2.56	2.58	2.57	2.54	2.53	2.55	2.57	2.54	2.56	2.53	2.50	2.53	2.55
All areas.....	3.02	3.03	3.03	3.00	2.99	3.00	3.01	3.02	3.03	3.02	3.00	3.02	3.01

See footnotes on page 16.

Table 11.-Estimated value per 100 pounds of concentrate rations fed to milk cows, by States and months, 1962 1/

State and division	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Me. ....	3.94	3.96	3.92	3.89	3.84	3.81	3.79	3.77	3.81	3.86	3.96	4.04	3.88
N. H. ....	3.94	3.92	3.89	3.87	3.83	3.80	3.77	3.74	3.78	3.82	3.88	3.94	3.85
Vt. ....	3.88	3.93	3.88	3.84	3.80	3.76	3.74	3.74	3.75	3.76	3.80	3.86	3.81
Mass. ....	3.84	3.81	3.78	3.76	3.75	3.74	3.74	3.75	3.76	3.78	3.84	3.90	3.79
R. I. ....	3.80	3.78	3.76	3.74	3.74	3.75	3.76	3.76	3.78	3.79	3.83	3.87	3.78
Conn. ....	3.88	3.85	3.82	3.80	3.79	3.77	3.76	3.76	3.78	3.78	3.82	3.89	3.81
N. Y. ....	3.56	3.59	3.57	3.55	3.53	3.52	3.51	3.51	3.54	3.57	3.62	3.66	3.56
N. J. ....	3.58	3.59	3.58	3.57	3.57	3.57	3.56	3.57	3.58	3.59	3.62	3.65	3.59
Pa. ....	3.32	3.34	3.34	3.34	3.34	3.36	3.36	3.35	3.36	3.40	3.42	3.42	3.36
N. Atl. ....	3.57	3.57	3.55	3.55	3.53	3.51	3.52	3.51	3.53	3.54	3.58	3.63	3.55
Ohio.....	2.70	2.68	2.70	2.74	2.78	2.74	2.73	2.75	2.76	2.72	2.72	2.78	2.73
Ind. ....	2.79	2.78	2.76	2.74	2.76	2.80	2.84	2.86	2.84	2.81	2.85	2.89	2.81
Ill. ....	2.50	2.55	2.51	2.49	2.52	2.51	2.50	2.49	2.48	2.45	2.44	2.45	2.49
Mich. ....	2.78	2.84	2.78	2.72	2.68	2.72	2.76	2.80	2.79	2.78	2.81	2.84	2.78
Wis. ....	2.67	2.69	2.71	2.73	2.73	2.72	2.71	2.71	2.72	2.72	2.73	2.75	2.72
E.N. Cent. .	2.70	2.69	2.68	2.68	2.68	2.66	2.70	2.74	2.73	2.72	2.74	2.76	2.71
Minn. ....	2.44	2.49	2.51	2.53	2.48	2.42	2.36	2.32	2.36	2.40	2.46	2.52	2.44
Iowa.....	2.28	2.32	2.36	2.39	2.38	2.36	2.35	2.32	2.28	2.24	2.28	2.32	2.32
Mo. ....	2.63	2.63	2.62	2.60	2.62	2.64	2.66	2.66	2.67	2.67	2.72	2.76	2.66
N. Dak. ....	1.88	1.94	1.91	1.90	1.86	1.81	1.78	1.74	1.70	1.66	1.72	1.78	1.81
S. Dak. ....	2.02	2.02	2.01	2.00	2.00	1.98	1.96	1.96	1.98	2.00	2.04	2.10	2.01
Nebr. ....	2.11	2.14	2.17	2.19	2.20	2.22	2.23	2.24	2.23	2.23	2.22	2.21	2.20
Kans. ....	2.36	2.38	2.40	2.42	2.39	2.35	2.32	2.35	2.39	2.43	2.48	2.53	2.40
W.N. Cent. .	2.37	2.36	2.38	2.40	2.40	2.36	2.34	2.30	2.32	2.34	2.37	2.42	2.36
Del. ....	3.42	3.46	3.50	3.53	3.51	3.48	3.45	3.44	3.43	3.43	3.46	3.50	3.47
Md. ....	3.32	3.36	3.38	3.41	3.42	3.42	3.41	3.42	3.37	3.37	3.37	3.45	3.39
Va. ....	3.34	3.37	3.39	3.41	3.42	3.44	3.46	3.46	3.47	3.48	3.49	3.50	3.44
W. Va. ....	3.80	3.83	3.80	3.78	3.80	3.83	3.86	3.90	3.86	3.81	3.84	3.88	3.83
N. C. ....	3.39	3.41	3.43	3.46	3.47	3.49	3.51	3.50	3.49	3.49	3.50	3.52	3.47
S. C. ....	3.32	3.38	3.32	3.29	3.29	3.33	3.37	3.39	3.35	3.30	3.27	3.34	3.33
Ge. ....	3.20	3.20	3.22	3.24	3.26	3.29	3.31	3.31	3.32	3.32	3.34	3.36	3.28
Fla. ....	2.72	2.66	2.69	2.74	2.78	2.82	2.84	2.82	2.80	2.78	2.86	2.92	2.79
S. Atl. ....	3.20	3.18	3.20	3.22	3.25	3.28	3.30	3.31	3.29	3.29	3.30	3.34	3.26
Ky. ....	3.16	3.22	3.24	3.26	3.24	3.22	3.22	3.18	3.14	3.09	3.15	3.20	3.19
Tenn. ....	3.09	3.10	3.10	3.11	3.12	3.13	3.14	3.14	3.13	3.13	3.14	3.16	3.12
Ala. ....	2.98	2.98	3.00	3.02	3.02	3.02	3.04	3.02	3.00	2.98	3.01	3.04	3.01
Miss. ....	2.92	2.96	3.00	3.04	3.06	3.08	3.10	3.08	3.04	3.00	3.04	3.10	3.04
Ark. ....	3.00	3.02	3.04	3.03	3.02	2.98	2.98	2.98	3.00	3.02	3.06	3.10	3.02
La. ....	3.26	3.28	3.30	3.31	3.31	3.34	3.36	3.33	3.30	3.26	3.32	3.38	3.31
Okla. ....	2.78	2.80	2.82	2.83	2.82	2.81	2.80	2.79	2.80	2.82	2.88	2.93	2.82
Tex. ....	3.08	3.09	3.08	3.06	3.02	3.00	2.98	2.96	2.96	2.96	2.99	3.02	3.02
S. Cent. ....	3.06	3.07	3.07	3.07	3.08	3.07	3.06	3.04	3.03	3.03	3.06	3.11	3.06
Mont. ....	2.48	2.52	2.50	2.50	2.48	2.46	2.44	2.42	2.40	2.37	2.39	2.41	2.45
Idaho.....	2.82	2.86	2.88	2.90	2.89	2.88	2.87	2.86	2.84	2.82	2.81	2.81	2.85
Wyo. ....	2.70	2.68	2.70	2.71	2.70	2.70	2.70	2.68	2.66	2.64	2.62	2.64	2.68
Colo. ....	2.64	2.66	2.66	2.68	2.70	2.71	2.72	2.70	2.72	2.70	2.72	2.75	2.70
N. Mex. ....	3.22	3.20	3.19	3.18	3.16	3.18	3.16	3.14	3.16	3.19	3.23	3.27	3.19
Ariz. ....	3.48	3.46	3.44	3.42	3.40	3.40	3.42	3.46	3.48	3.50	3.54	3.57	3.46
Utah.....	2.86	2.88	2.90	2.92	2.92	2.90	2.90	2.88	2.86	2.84	2.88	2.92	2.89
Nev. ....	3.30	3.28	3.30	3.31	3.34	3.32	3.28	3.24	3.20	3.16	3.19	3.24	3.26
Wash. ....	3.24	3.25	3.26	3.27	3.28	3.30	3.33	3.35	3.32	3.31	3.32	3.34	3.30
Oreg. ....	3.24	3.28	3.26	3.28	3.28	3.28	3.26	3.24	3.22	3.20	3.20	3.23	3.25
Calif. ....	3.22	3.20	3.22	3.20	3.22	3.24	3.26	3.28	3.30	3.30	3.30	3.30	3.25
West. ....	3.13	3.14	3.14	3.13	3.14	3.16	3.19	3.16	3.16	3.16	3.17	3.18	3.16
U. S.:													
Milk areas 2/	2.94	2.94	2.94	2.94	2.94	2.93	2.94	2.94	2.94	2.95	2.97	3.01	2.95
Cream areas 2/	2.46	2.45	2.47	2.48	2.48	2.45	2.44	2.40	2.42	2.43	2.46	2.51	2.45
All areas.....	2.92	2.91	2.91	2.92	2.92	2.91	2.92	2.91	2.92	2.92	2.94	2.98	2.92

See footnotes on page 16.

Table 12.-Milk-feed price ratios, by States and months, 1963 1/

State and division	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Me. ....	1.29	1.31	1.28	1.22	1.18	1.15	1.31	1.38	1.38	1.45	1.45	1.41	1.32
N. H. ....	1.37	1.38	1.32	1.26	1.22	1.20	1.35	1.42	1.42	1.47	1.50	1.46	1.36
Vt. ....	1.25	1.22	1.16	1.09	1.08	1.07	1.23	1.29	1.28	1.36	1.36	1.33	1.23
Mass. ....	1.42	1.43	1.39	1.35	1.29	1.27	1.45	1.51	1.51	1.61	1.58	1.54	1.45
R. I. ....	1.46	1.45	1.43	1.37	1.29	1.26	1.47	1.54	1.56	1.65	1.64	1.58	1.48
Conn. ....	1.43	1.39	1.37	1.32	1.29	1.27	1.53	1.57	1.54	1.58	1.58	1.52	1.45
N. Y. ....	1.20	1.17	1.13	1.09	1.05	1.04	1.17	1.23	1.28	1.33	1.35	1.28	1.19
N. J. ....	1.39	1.37	1.33	1.25	1.21	1.21	1.32	1.36	1.43	1.47	1.49	1.49	1.36
Pa. ....	1.39	1.37	1.33	1.25	1.21	1.21	1.29	1.34	1.40	1.46	1.48	1.45	1.35
N. Atl. ....	1.29	1.26	1.21	1.16	1.13	1.12	1.25	1.31	1.36	1.41	1.43	1.37	1.28
Ohio.....	1.55	1.52	1.48	1.35	1.30	1.26	1.28	1.36	1.46	1.56	1.61	1.58	1.44
Ind. ....	1.41	1.41	1.42	1.31	1.27	1.23	1.25	1.32	1.41	1.49	1.54	1.52	1.38
Ill. ....	1.54	1.53	1.47	1.43	1.37	1.34	1.37	1.41	1.46	1.53	1.61	1.59	1.47
Mich. ....	1.48	1.45	1.42	1.36	1.32	1.28	1.28	1.34	1.40	1.46	1.50	1.48	1.40
Wis. ....	1.24	1.21	1.19	1.18	1.18	1.16	1.19	1.22	1.26	1.28	1.28	1.26	1.22
E. N. Cent.	1.36	1.33	1.31	1.28	1.25	1.23	1.26	1.30	1.35	1.39	1.43	1.40	1.32
Minn. ....	1.26	1.24	1.23	1.22	1.22	1.20	1.22	1.25	1.30	1.32	1.34	1.30	1.26
Iowa.....	1.55	1.51	1.50	1.44	1.40	1.37	1.42	1.46	1.51	1.56	1.61	1.59	1.49
Mo. ....	1.43	1.40	1.31	1.23	1.20	1.20	1.21	1.29	1.36	1.48	1.51	1.52	1.34
N. Dak. ....	1.81	1.80	1.78	1.74	1.73	1.69	1.75	1.91	1.99	2.09	2.05	2.05	1.87
S. Dak. ....	1.60	1.57	1.56	1.54	1.52	1.50	1.57	1.59	1.66	1.68	1.68	1.64	1.59
Nebr. ....	1.82	1.73	1.70	1.53	1.47	1.43	1.50	1.55	1.71	1.76	1.86	1.79	1.65
Kans. ....	1.64	1.62	1.57	1.48	1.48	1.44	1.44	1.51	1.59	1.64	1.69	1.69	1.57
W. N. Cent.	1.42	1.38	1.36	1.34	1.33	1.30	1.32	1.39	1.43	1.48	1.51	1.48	1.40
Del. ....	1.35	1.35	1.34	1.24	1.21	1.21	1.32	1.38	1.43	1.57	1.57	1.54	1.38
Md. ....	1.36	1.36	1.32	1.24	1.21	1.22	1.31	1.34	1.42	1.52	1.52	1.52	1.36
Va. ....	1.48	1.46	1.41	1.31	1.26	1.24	1.26	1.26	1.35	1.44	1.48	1.46	1.37
W. Va. ....	1.21	1.22	1.21	1.10	1.07	1.05	1.09	1.13	1.21	1.22	1.28	1.28	1.17
N. C. ....	1.64	1.64	1.62	1.54	1.57	1.49	1.52	1.53	1.61	1.68	1.70	1.68	1.60
S. C. ....	1.78	1.78	1.70	1.56	1.60	1.50	1.58	1.66	1.73	1.78	1.78	1.74	1.68
Ga. ....	1.80	1.80	1.77	1.71	1.76	1.69	1.70	1.71	1.78	1.82	1.83	1.80	1.76
Fla. ....	2.25	2.19	2.08	1.98	2.00	1.98	2.02	2.08	2.12	2.19	2.18	2.12	2.10
S. Atl. ....	1.65	1.64	1.59	1.50	1.49	1.45	1.49	1.51	1.58	1.65	1.68	1.67	1.58
Ky. ....	1.30	1.26	1.21	1.09	1.05	1.03	1.02	1.12	1.22	1.31	1.39	1.40	1.20
Tenn. ....	1.45	1.42	1.36	1.26	1.23	1.21	1.21	1.25	1.35	1.46	1.53	1.55	1.36
Ala. ....	1.88	1.86	1.81	1.75	1.76	1.75	1.76	1.73	1.83	1.86	1.89	1.83	1.81
Miss. ....	1.68	1.66	1.54	1.42	1.41	1.37	1.35	1.40	1.80	1.61	1.70	1.75	1.56
Ark. ....	1.54	1.48	1.37	1.31	1.29	1.27	1.28	1.32	1.37	1.43	1.51	1.58	1.40
La. ....	1.74	1.74	1.64	1.56	1.66	1.63	1.61	1.61	1.64	1.69	1.71	1.72	1.66
Okla. ....	1.57	1.52	1.47	1.43	1.39	1.38	1.39	1.45	1.51	1.62	1.67	1.70	1.51
Tex. ....	1.73	1.73	1.60	1.52	1.52	1.49	1.60	1.63	1.69	1.75	1.75	1.74	1.65
S. Cent. ...	1.59	1.56	1.47	1.37	1.35	1.31	1.34	1.38	1.49	1.55	1.61	1.64	1.47
Mont. ....	1.95	1.93	1.90	1.84	1.78	1.77	1.80	1.88	1.97	2.02	2.03	2.03	1.91
Idaho.....	1.26	1.23	1.22	1.22	1.16	1.17	1.19	1.23	1.27	1.34	1.36	1.37	1.25
Wyo. ....	1.64	1.62	1.58	1.56	1.52	1.49	1.52	1.59	1.65	1.72	1.77	1.73	1.62
Colo. ....	1.75	1.70	1.68	1.62	1.58	1.53	1.56	1.64	1.73	1.73	1.79	1.77	1.67
N. Mex. ....	1.64	1.59	1.52	1.44	1.40	1.37	1.53	1.55	1.62	1.65	1.66	1.62	1.55
Ariz. ....	1.46	1.40	1.36	1.31	1.30	1.26	1.32	1.31	1.36	1.37	1.42	1.40	1.36
Utah.....	1.47	1.41	1.39	1.38	1.34	1.31	1.33	1.36	1.47	1.50	1.53	1.51	1.42
Nev. ....	1.67	1.62	1.59	1.50	1.49	1.51	1.49	1.49	1.53	1.53	1.59	1.63	1.55
Wash. ....	1.32	1.29	1.29	1.25	1.23	1.22	1.25	1.27	1.31	1.30	1.32	1.32	1.28
Oreg. ....	1.44	1.38	1.31	1.30	1.27	1.22	1.27	1.35	1.41	1.47	1.51	1.51	1.37
Calif. ....	1.40	1.36	1.33	1.31	1.29	1.28	1.28	1.29	1.35	1.35	1.38	1.42	1.34
West. ....	1.41	1.38	1.36	1.34	1.30	1.27	1.28	1.31	1.37	1.39	1.42	1.42	1.35
U. S. ....	1.40	1.37	1.32	1.28	1.26	1.23	1.29	1.34	1.41	1.45	1.48	1.45	1.36

1/ Pounds of concentrate ration equal in value to 1 pound of whole milk sold by farmers to plants and dealers. Obtained by dividing the price per 100 pounds received by farmers for milk (as published in the report, Agricultural Prices) by the value per 100 pounds of concentrate rations fed to milk cows. Ratios are preliminary for 1963.

Table 13.—Milk-feed price ratios, by States and months, 1962 1/

State and division	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Me. ....	1.42	1.39	1.34	1.20	1.18	1.18	1.35	1.43	1.40	1.45	1.41	1.35	1.34
N. H. ....	1.41	1.40	1.38	1.25	1.23	1.22	1.41	1.50	1.47	1.49	1.47	1.42	1.39
Vt. ....	1.30	1.26	1.24	1.09	1.08	1.08	1.23	1.31	1.31	1.33	1.33	1.28	1.24
Mass. ....	1.47	1.48	1.48	1.34	1.31	1.31	1.47	1.55	1.56	1.60	1.55	1.49	1.47
R. I. ....	1.51	1.52	1.52	1.39	1.35	1.35	1.54	1.60	1.59	1.65	1.64	1.55	1.52
Conn. ....	1.46	1.45	1.47	1.30	1.25	1.29	1.53	1.58	1.59	1.59	1.56	1.49	1.46
N. Y. ....	1.27	1.24	1.19	1.09	1.05	1.05	1.19	1.27	1.29	1.33	1.31	1.23	1.21
N. J. ....	1.49	1.47	1.41	1.34	1.28	1.29	1.39	1.44	1.48	1.51	1.50	1.47	1.42
Pa. ....	1.48	1.44	1.41	1.29	1.24	1.24	1.31	1.37	1.43	1.47	1.48	1.43	1.38
N. Atl. ....	1.36	1.33	1.30	1.18	1.14	1.14	1.27	1.34	1.37	1.42	1.41	1.33	1.30
Ohio.....	1.67	1.66	1.60	1.44	1.34	1.35	1.38	1.46	1.53	1.60	1.64	1.59	1.52
Ind. ....	1.56	1.53	1.52	1.35	1.25	1.21	1.23	1.29	1.41	1.48	1.54	1.52	1.41
Ill. ....	1.58	1.55	1.51	1.43	1.37	1.33	1.38	1.43	1.49	1.55	1.60	1.57	1.48
Mich. ....	1.58	1.51	1.53	1.45	1.40	1.36	1.34	1.38	1.42	1.49	1.49	1.48	1.45
Wis. ....	1.35	1.33	1.28	1.22	1.19	1.18	1.21	1.23	1.26	1.29	1.29	1.27	1.26
E. N. Cent.	1.46	1.45	1.41	1.33	1.28	1.27	1.27	1.30	1.37	1.41	1.42	1.39	1.36
Minn. ....	1.41	1.37	1.31	1.25	1.25	1.28	1.33	1.38	1.40	1.40	1.34	1.29	1.33
Iowa.....	1.62	1.57	1.50	1.38	1.32	1.33	1.36	1.40	1.47	1.56	1.56	1.55	1.47
Mo. ....	1.58	1.52	1.43	1.31	1.24	1.25	1.26	1.32	1.39	1.46	1.49	1.45	1.39
N. Dak. ....	1.84	1.73	1.68	1.66	1.61	1.66	1.69	1.78	1.97	2.02	1.98	1.88	1.79
S. Dak. ....	1.78	1.73	1.67	1.58	1.52	1.54	1.58	1.63	1.67	1.68	1.67	1.62	1.64
Nebr. ....	1.97	1.89	1.84	1.64	1.52	1.51	1.59	1.61	1.75	1.79	1.82	1.74	1.72
Kans. ....	1.80	1.72	1.69	1.51	1.44	1.49	1.51	1.53	1.61	1.63	1.63	1.60	1.60
W. N. Cent.	1.55	1.52	1.46	1.36	1.32	1.34	1.38	1.44	1.50	1.52	1.51	1.45	1.45
Del.....	1.42	1.40	1.34	1.20	1.15	1.21	1.26	1.29	1.33	1.49	1.49	1.46	1.34
Md.....	1.54	1.49	1.43	1.32	1.27	1.30	1.32	1.33	1.41	1.51	1.54	1.46	1.41
Va.....	1.56	1.53	1.49	1.36	1.30	1.28	1.26	1.29	1.34	1.41	1.48	1.47	1.40
W. Va.....	1.34	1.29	1.25	1.14	1.05	1.04	1.06	1.17	1.22	1.27	1.29	1.22	1.20
N. C.....	1.68	1.66	1.66	1.53	1.53	1.49	1.48	1.52	1.60	1.62	1.65	1.60	1.58
S. C.....	1.76	1.70	1.73	1.67	1.67	1.62	1.62	1.62	1.75	1.77	1.83	1.72	1.70
Ga.....	1.91	1.88	1.83	1.76	1.78	1.75	1.72	1.72	1.81	1.85	1.87	1.80	1.81
Fla.....	2.43	2.46	2.45	2.32	2.27	2.29	2.32	2.36	2.41	2.41	2.34	2.28	2.36
S. Atl. ....	1.76	1.75	1.72	1.60	1.55	1.54	1.53	1.56	1.63	1.69	1.73	1.67	1.64
Ky. ....	1.36	1.27	1.23	1.09	1.03	1.04	1.04	1.13	1.26	1.33	1.37	1.36	1.21
Tenn. ....	1.50	1.44	1.35	1.27	1.22	1.20	1.18	1.23	1.33	1.37	1.45	1.46	1.33
Ala. ....	1.95	1.88	1.85	1.75	1.79	1.79	1.74	1.79	1.87	1.90	1.91	1.84	1.84
Miss. ....	1.83	1.71	1.62	1.48	1.42	1.40	1.39	1.44	1.56	1.68	1.74	1.68	1.58
Ark. ....	1.62	1.54	1.45	1.30	1.24	1.26	1.26	1.31	1.40	1.46	1.54	1.52	1.41
La. ....	1.89	1.81	1.77	1.65	1.68	1.66	1.61	1.67	1.71	1.78	1.73	1.69	1.72
Okla. ....	1.74	1.66	1.63	1.47	1.40	1.44	1.45	1.49	1.55	1.60	1.61	1.59	1.55
Tex. ....	1.76	1.69	1.58	1.48	1.45	1.47	1.57	1.63	1.72	1.73	1.77	1.73	1.63
S. Cent. ...	1.67	1.59	1.52	1.39	1.33	1.33	1.34	1.41	1.51	1.56	1.62	1.59	1.49
Mont. ....	1.94	1.83	1.82	1.70	1.65	1.65	1.70	1.80	1.88	1.98	1.99	1.95	1.82
Idaho.....	1.33	1.29	1.23	1.14	1.11	1.09	1.10	1.12	1.16	1.21	1.25	1.26	1.19
Wyo. ....	1.59	1.62	1.57	1.49	1.46	1.41	1.43	1.49	1.56	1.61	1.66	1.63	1.54
Colo. ....	1.95	1.88	1.86	1.72	1.65	1.61	1.58	1.67	1.74	1.76	1.78	1.70	1.74
N. Mex. ....	1.63	1.64	1.58	1.54	1.47	1.43	1.50	1.59	1.61	1.66	1.66	1.62	1.58
Ariz. ....	1.55	1.53	1.51	1.48	1.47	1.44	1.42	1.43	1.45	1.47	1.47	1.46	1.47
Utah.....	1.54	1.49	1.47	1.35	1.30	1.29	1.29	1.35	1.42	1.46	1.46	1.47	1.41
Nev. ....	1.64	1.63	1.59	1.51	1.47	1.43	1.45	1.53	1.58	1.65	1.66	1.64	1.56
Wash. ....	1.47	1.42	1.41	1.35	1.27	1.26	1.26	1.27	1.28	1.33	1.34	1.33	1.33
Oreg. ....	1.48	1.40	1.37	1.27	1.23	1.25	1.26	1.31	1.38	1.44	1.48	1.47	1.36
Calif. ....	1.48	1.48	1.43	1.33	1.30	1.27	1.27	1.28	1.31	1.35	1.36	1.38	1.35
West. ....	1.50	1.47	1.44	1.35	1.31	1.28	1.27	1.31	1.35	1.39	1.41	1.41	1.37
U. S. ....	1.50	1.47	1.43	1.32	1.28	1.27	1.31	1.37	1.43	1.47	1.48	1.43	1.40

1/ See footnote on page 14.

OFFICIAL BUSINESS

Table 14. Milkfat-feed price ratios, selected regions by months, 1962 and 1963 <sup>1/</sup>

Region	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
	<u>1962</u>												
E. N. Cent. ..	21.5	21.6	21.5	20.7	20.6	20.5	20.3	20.2	20.5	20.5	20.4	20.4	20.7
W. N. Cent. ..	26.7	26.8	26.2	25.1	24.9	25.3	25.4	26.0	25.8	25.6	25.4	25.1	25.7
S. Cent. ....	17.2	17.2	17.2	16.6	16.5	16.6	16.7	16.8	17.1	17.1	17.0	16.8	16.9
West. ....	19.1	18.9	18.9	18.3	18.2	18.0	18.0	18.1	18.2	18.2	18.2	18.3	18.4
U. S. ....	25.2	25.3	24.8	23.9	23.7	23.9	23.9	24.5	24.3	24.2	24.1	23.8	24.3
	<u>1963 <sup>2/</sup></u>												
E. N. Cent. ..	20.0	20.2	20.0	20.3	20.3	20.1	20.0	19.8	19.7	19.8	20.0	19.7	20.0
W. N. Cent. ..	24.3	24.1	24.1	24.2	24.4	24.1	23.8	24.1	24.1	24.3	24.7	24.6	24.2
S. Cent. ....	16.4	16.3	16.3	16.1	16.2	16.0	16.0	16.2	16.4	16.4	16.2	16.2	16.2
West. ....	18.3	18.2	18.5	18.7	18.4	18.2	18.0	18.2	18.4	18.3	18.2	18.0	18.3
U. S. ....	23.0	22.8	22.9	23.0	23.1	22.9	22.6	22.8	22.8	23.0	23.3	23.2	23.0

<sup>1/</sup> Pounds of concentrate ration equal in value to 1 pound of milkfat. Obtained by dividing the price per pound received by farmers for milkfat in cream by the value per pound of concentrate rations fed to milk cows. The ration value used for the United States is the average for the cream-selling areas. <sup>2/</sup> Preliminary.

Footnotes for Tables 10 and 11:

<sup>1/</sup> Estimates of ration values are based on quarterly reports from dairy correspondents on value per 100 pounds of concentrate ration actually being fed, with intervening months interpolated on basis of monthly reports in a few States, and changes in prices of feeds usually included in the ration. <sup>2/</sup> Average ration values for milk-selling areas are obtained by combining regional values in proportion to the quantity of whole milk sold by farmers to plants and dealers. For cream areas, regional weights are based on the quantity of milk separated on farms for sale as cream.