

# FEED OUTLOOK

United States Department of Agriculture

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Economic Research Service

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Approved by the World Agricultural Outlook Board

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## HIGHLIGHTS

- o Corn Ending Stocks Projection Up 25 Million Bushels
- o U.S. Corn Export Forecast Reduced to 1,875 Million Bushels
- o Feed and Residual Use of Corn Raised, Barley Trimmed
- o What's Behind the Rise in East Europe's Corn Exports

## WEAKER EXPORT OUTLOOK LEADS TO SMALL INCREASE IN FEED GRAIN STOCKS

Carryout stocks of feed grains in 1997/98 are projected at 28.5 million metric tons, up 0.7 million from a month ago, due to lower exports. Domestic use is up slightly as larger prospective corn feed and residual use outweighs a small decline in barley. Price expectations are down slightly for corn and sorghum in response to the dip in total use and prospective gain in stocks.

There was no change in U.S. feed grain production this month, forecast at 265.2 million tons, pending the release of final crop estimates in January. Feed grain supplies are down slightly at 294.9 million tons due to a small reduction in forecast barley imports.

The market is expected to be fairly quiet in the next few weeks, reflecting the holiday period and anticipation of benchmark data released in January. In addition to crop production estimates, grain stocks on December 1 will be reported, allowing an assessment of disappearance for the September-November quarter. While the pace of corn exports has been very sluggish, domestic use has been relatively brisk. In contrast to corn, barley exports have been moving at a torrid pace.

## CORN CARRYOUT PEGGED AT 953 MILLION BUSHELS

Projected ending stocks of corn in 1997/98 are up 25 million bushels this month as an increase in feed and residual use is more than offset by a cut in exports. Although stocks will be up from 884 million bushels in 1996/97, they will be below 1 billion bushels for the third consecutive year, indicative of a continued tight supply demand balance. The ratio of stocks to use is projected at 10.3 percent, up slightly from 10 percent the year before.

## FEED AND RESIDUAL USE OF CORN RAISED, BARLEY TRIMMED

Feed and residual use of the four feed grains plus wheat is forecast at 168 million metric tons in 1997/98, up almost 2 percent from the previous year. Corn will account for nearly all of the increase, with sorghum, barley, and wheat (on a September-August year) expected to decline. Because animal inventories are up, the grain used per grain consuming animal unit (GCAU) is expected to shrink slightly.

Corn feed and residual use is forecast at a record 5,650 million bushels, up 25 million from last month. This offsets a 10-million-bushel reduction in barley feed and residual to 160 million bushels. If this forecast is realized, barley feed and residual would be lower than in the drought year of 1988/89 and the lowest since the early 1950's. The key factor limiting the barley feed and residual is the huge spike in exports this year, with dramatic gains in sales to Saudi Arabia and continued sales to Japan. This month, the forecast barley supply is also down slightly due to a 5-million-bushel reduction in forecast imports to 35 million bushels.

#### PRICE FORECASTS TRIMMED FOR 1997/98 CORN AND SORGHUM

The forecast season average farm price of corn is reduced 5 cents on each end of the range to \$2.40-2.80 per bushel. This is mainly because of sagging export prospects and the outlook for slightly larger stocks. Similarly, the sorghum price forecast is also down 5 cents to \$2.10-2.50 per bushel, reflecting the strong influence of corn.

Farm prices over the first 3 months of the 1997/98 marketing year have quite low relative to a year ago, but reasonably firm when judged over a longer time frame. In 1996/97, the weighted average corn price for September-November was \$2.87 per bushel. This was the transition between the severely tight market of the year before and the impact of more abundant new-crop supplies. This year, the price will be down more than 30 cents, judging from the simple average of \$2.52 (including the preliminary November price).

Corn prices are expected to rise somewhat over the next few months, assuming a typical seasonal pattern, before weakening in the summer if new-crop prospects are favorable. However, there is a great deal of uncertainty linked to different market influences. There has been a progressive slippage in export forecasts in recent months, stemming from unexpected exports by China, then increased exportable supplies of feed wheat, and now more corn exports from Eastern Europe. Moreover, there is concern about more weakness in import demand if the Asian economic crisis worsens. Nevertheless, prices have been quite resilient in the face of this news, underpinned by solid domestic demand. Furthermore, the market may retain a risk premium due to widespread fears about the potential of El Nino to harm future production. Finally, some analysts raise the possibility that China could become a significant importer later in the year.

#### FARMERS' MARKETINGS OF CORN WERE LATER THAN AVERAGE IN 1996/97

The final season average price of corn received by farmers in 1996/97 was \$2.71 per bushel. This reflects prices weighted by marketings for which data were just recently released. The data tend to confirm anecdotal reports that farmers held on to their corn a bit longer than normal. Some analysts expect this pattern to continue as farmers position themselves to catch any late season price rallies. While prices do tend to rise seasonally, there is also risk in this strategy if prices fail to cover added storage costs and the grain is not priced in advance.

In 1995/96, when there was a short corn crop, a higher than average share of 46 percent of marketings occurred in the first 4 months, before prices had skyrocketed on their way to record highs. This pattern was similar to 1993/94, another year of crop problems and reduced output, except that prices in that year increased only moderately. Average September-December marketings during 1980-94 were about 40 percent.

During 1996/97, farmers marketed less than 37 percent in the first 4 months, a bit below the record harvest year of 1994/95 and the lowest since 1986/87 and 1987/88. The recent

market environment features more robust demand and no burdensome stocks, a dramatic difference from during the mid-1980's. During the 1986 and 1987 marketing years, use of the loan program and farmer-owned reserve both peaked. Deficiency payment outlays hit record highs in those years.

#### U.S. CORN EXPORT FORECAST DOWN THIS MONTH

Forecast 1997/98 U.S. corn exports dropped 50 million bushels this month to 1,875 million because of increased competition from Eastern Europe. The October/September forecast is down 1 million tons this month to 47.5 million, less than 1 million above last year. The early season pace has been unspectacular, with Export Sales data indicating November 1997 corn shipments of about 3 million tons, half the 6.1 million exported a year earlier. Moreover, as of December 4, outstanding export sales of U.S. corn were down 35 percent from a year ago. During most of 1997, U.S. corn exports have faced strong competition from China in important Asian markets. However, given China's drought-reduced crop harvested this fall, its corn exports are expected to taper off sharply for the rest of the year. U.S. exports are still forecast to increase from 1996/97 with reduced competition from China expected over the rest of the marketing year. However, the macro-economic developments in several Asian countries have potentially dampened demand. Moreover, just as corn export sales by China dropped off in recent weeks, sales from Eastern Europe, especially Hungary, increased.

#### EAST EUROPE'S CORN PRODUCTION AND EXPORTS BURGEONING

Eastern Europe has a long tradition of corn production and exports. For example, before World War II the region's exports were generally larger than U.S. exports and Romania was the world's second largest corn exporter, trailing Argentina. Parts of Romania, Serbia, and Hungary enjoy the combination of adequate rainfall, excellent soils, and appropriate temperatures for growing corn in abundance. Much of the best land for growing corn in Europe is in these countries plus the Ukraine and parts of Russia near the Black Sea.

During most of the 1960s and 1970s Eastern Europe (not including the former Soviet Union) exported over 1 million tons of corn per year, with most being shipped to the Soviet Union or neighboring countries. However, during most of the Communist period the region as a whole was a net importer, led by Poland.

However, beginning in 1989 and 1990, political/economic changes disrupted agricultural production, transforming production and demand for corn. East European corn area fell from 7.4 million hectares in 1986 to 6.4 million in 1990. Production fell as large production units were dismantled in several countries, fertilizer and pesticide use dropped as subsidies ended, and large irrigation systems collapsed. At the same time, a liquidation of livestock and poultry reduced domestic demand. War and economic embargoes were particularly disruptive in the former Yugoslavia. Weather was not particularly cooperative, corn exports dwindled, and the region was a large net importer from 1987 to 1990.

In 1991, despite continued low input use, favorable weather boosted average yields to near record levels. With increased production and domestic demand limited by reduced animal numbers, and fairly attractive prices on the world market, the region exported 3.2 million tons, much of it outside the region. Antiquated port facilities and high transportation costs from producing regions to ports limited exports. However, in the next several years production was much lower, despite increased area, and exports slumped. By 1995 and 1996, economic chaos had subsided somewhat in most countries, weather was reasonable, and corn production increased while animal numbers remained low. Exports increased, but were still limited by poor infrastructure. When the region was exporting to nearby countries, most

shipments were by rail, but as more exports now move outside the region, shipment to a port is crucial. Hungary has had to export either through war-torn Former Yugoslavia, or through Romania, where increased grain handling capacity at the ports has come slowly.

In 1997/98, Eastern Europe is forecast to produce 30 million tons of corn, up almost 20 percent from a year ago, and the largest in 6 years as good weather boosted yields. This month, Romania's corn production forecast increased 1.5 million tons to 12.0 million, up 25 percent from a year ago, despite a drop in area planted because of low prices, high carryover stocks, and lack of government support. Yields jumped a spectacular 33 percent despite reduced use of inputs such as fertilizer and irrigation. However, the increase in corn exports will be limited by logistical problems, especially because much of the port capacity has already been booked for Hungarian grain. The former Yugoslavia is also forecast to boost production 25 percent this year, reaching 9.5 million tons. In Hungary the crop did not increase as much, but export sales have been aggressive, and exports are forecast to reach 1.2 million tons, while the entire Eastern Europe is projected to export 2.9 million.

The port capacity on the Black Sea is a particular constraint on Eastern Europe's corn exports this year because both the corn and wheat crops were large. Wheat of normal milling quality has a higher value than corn and usually has priority at the ports. However, a large part of Eastern Europe's wheat crop was rained on at harvest, and the quality, never particularly high, was reduced in many areas to feed-quality. Low ocean freight rates have made it possible to sell corn and feed wheat out of the Black Sea to markets as far away as South Korea. However, the inland transportation and ports are enough of a bottleneck that corn prices at the Danube in Hungary have recently been as low as \$60 per ton, while Fob Black Sea corn is \$105 per ton.

If transportation infrastructure and port capacity constraints were not so binding, Eastern Europe would export significantly more corn and feed wheat this year than is currently forecast. The long term prospects are that with peace and more economic stability, investments will be made. The region's animal numbers are likely to grow over time, increasing domestic demand for grain. However, USDA's baseline projections indicate that, given the favorable resources of soil and climate, grain production is likely to grow faster, making Eastern Europe an ever more important competitor for U.S. corn.

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REPORTS IN 1998

Because of resource constraints, ERS will publish only 6 issues of this report in 1998. The next report will be released at 3 PM on January 14, 1998. We will continue to publish the feed Yearbook, which will be released on April 3, 1998. This will include both sector data and analysis of critical issues and topics. Check the ERS web site (<http://econ.ag.gov>) for the full schedule and for other publications relating to feed grains. If you have questions or comments about this change in our schedule, please contact Joy Harwood, Chief, Field Crops Branch (202-694-5310; [jharwood@econ.ag.gov](mailto:jharwood@econ.ag.gov)) or Fred Surls, Outlook Program Coordinator (202 694-5320; [fsurls@econ.ag.gov](mailto:fsurls@econ.ag.gov)).

PLEASE NOTE: ERS HAS MOVED AND ALL PHONE NUMBERS CHANGED IN NOVEMBER.  
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The next Feed Outlook will be released January 14, 1998.

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Table 1--Feed Grains: Marketing year supply and disappearance 1/

Year/ Qtr.	Beg. stocks	Produc- tion	Im- ports	Supply	FSI	Feed & resid.	Ex- ports	Total disp.	End. stks.	Farm price
-----Million bushels-----										
CORN										
1994/95										
Sep-Nov	850	10,103	2	10,955	409	2,016	449	2,874	8,080	2.05
Dec-Feb	8,080	---	4	8,084	409	1,493	590	2,493	5,592	2.18
Mar-May	5,592	---	3	5,595	448	1,163	568	2,180	3,415	2.35
Jun-Aug	3,415	---	1	3,416	438	850	570	1,858	1,558	2.59
Mkt. yr.	850	10,103	10	10,962	1,704	5,523	2,177	9,405	1,558	2.26
1995/96										
Sep-Nov	1,558	7,374	4	8,935	413	1,756	660	2,830	6,106	2.80
Dec-Feb	6,106	---	5	6,111	401	1,348	562	2,311	3,800	3.15
Mar-May	3,800	---	5	3,805	429	1,048	610	2,087	1,718	3.76
Jun-Aug	1,718	---	3	1,721	370	530	396	1,295	426	4.31
Mkt. yr.	1,558	7,374	16	8,948	1,612	4,682	2,228	8,522	426	3.24
1996/97										
Sep-Nov	426	9,293	3	9,723	386	1,946	487	2,819	6,904	2.87
Dec-Feb	6,904	---	2	6,906	398	1,490	525	2,412	4,494	2.66
Mar-May	4,494	---	4	4,498	463	1,108	431	2,001	2,497	2.77
Jun-Aug	2,497	---	4	2,500	444	819	353	1,616	884	2.49
Mkt. yr.	426	9,293	13	9,733	1,691	5,362	1,795	8,849	884	2.71
1997/98										
Mkt. yr.	884	9,359	10	10,253	1,775	5,650	1,875	9,300	953	2.40-2.80
SORGHUM										
1994/95										
Sep-Nov	48	649	0	697	0	210	64	274	422	1.91
Dec-Feb	422	---	0	422	1	80	61	142	281	2.02
Mar-May	281	---	0	281	1	67	54	122	159	2.18
Jun-Aug	159	---	0	159	1	43	43	87	72	2.64
Mkt. yr.	48	649	0	697	3	400	223	625	72	2.13
1995/96										
Sep-Nov	72	460	0	532	1	176	54	231	301	2.88
Dec-Feb	301	---	0	301	1	71	67	139	163	3.25
Mar-May	163	---	0	163	5	51	36	92	70	3.94
Jun-Aug	70	---	0	70	4	7	41	52	18	3.63
Mkt. yr.	72	460	0	532	11	305	198	514	18	3.19
1996/97										
Sep-Nov	18	803	0	821	11	287	56	354	467	2.44
Dec-Feb	467	---	0	467	11	124	59	193	274	2.26
Mar-May	274	---	0	274	12	82	61	155	119	2.42
Jun-Aug	119	---	0	119	7	36	29	72	47	2.27
Mkt. yr.	18	803	0	821	40	529	205	774	47	2.34
1997/98										
Mkt. yr.	47	659	0	706	35	425	200	660	46	2.10-2.50

Table 1--Feed Grains: Marketing year supply and disappearance, (cont.) 1/

Year/ Qtr.	Beg. stocks	Produc- tion	Im- ports	Supply	FSI	Feed & resid.	Ex- ports	Total disp.	End. stks.	Farm price
-----Million bushels-----										
BARLEY										
1994/95										
Jun-Aug	139	375	24	538	45	120	20	186	352	2.00
Sep-Nov	352	---	14	366	37	31	19	87	279	1.98
Dec-Feb	279	---	14	292	38	51	11	99	193	2.05
Mar-May	193	---	14	207	52	26	17	95	113	2.15
Mkt. yr.	139	375	66	580	173	228	66	467	113	2.03
1995/96										
Jun-Aug	113	360	12	484	44	111	17	172	313	2.53
Sep-Nov	313	---	8	321	39	28	11	78	243	2.80
Dec-Feb	243	---	8	251	37	17	20	73	178	3.18
Mar-May	178	---	12	190	52	23	16	91	100	3.29
Mkt. yr.	113	360	41	513	172	179	62	413	100	2.89
1996/97										
Jun-Aug	100	396	9	504	44	137	7	188	316	3.11
Sep-Nov	316	---	8	324	39	25	12	76	248	2.74
Dec-Feb	248	---	8	256	37	40	7	84	173	2.55
Mar-May	173	---	11	184	53	18	4	74	110	2.33
Mkt. yr.	100	396	37	532	172	219	31	422	110	2.74
1997/98										
Mkt. yr.	110	374	35	519	172	160	90	422	97	2.30-2.50
OATS										
1994/95										
Jun-Aug	106	229	20	355	23	112	0.2	135	220	1.19
Sep-Nov	220	---	34	254	22	40	0.2	62	192	1.19
Dec-Feb	192	---	23	215	20	46	0.4	66	149	1.21
Mar-May	149	---	16	165	27	37	0.2	64	101	1.36
Mkt. yr.	106	229	93	428	92	234	1.0	327	101	1.22
1995/96										
Jun-Aug	101	162	28	290	23	86	0.4	110	180	1.48
Sep-Nov	180	---	26	206	22	31	0.5	53	153	1.52
Dec-Feb	153	---	18	171	20	38	0.3	58	113	1.94
Mar-May	113	---	9	122	27	28	0.8	56	66	2.21
Mkt. yr.	101	162	81	343	92	183	2.1	277	66	1.67
1996/97										
Jun-Aug	66	155	6	228	24	70	1.0	95	133	2.06
Sep-Nov	133	---	39	172	22	20	0.8	43	129	1.84
Dec-Feb	129	---	28	156	20	40	0.3	61	96	1.79
Mar-May	96	---	24	120	29	24	0.4	53	67	1.88
Mkt. yr.	66	155	97	319	95	155	2.5	252	67	1.96
1997/98										
Mkt. yr.	67	176	100	343	95	175	2.0	272	71	1.55-1.65

Totals may not add due to rounding.

1/ Corn and sorghum are on a September 1 to August 31 marketing year.  
Barley and oats are on a June 1 to May 31 marketing year.

Table 2--Feed and residual use of wheat and coarse grains

Year Beginning September 1	Corn	Sorg.	Barley	Oats	Feed Grains	Wheat	Total grains	Animal Units	Feed/ animal unit
Million metric tons					-----		Mil.	Tons	
1994/95									
Sep-Nov	51.2	5.3	0.7	0.7	57.9	-0.8	57.1		
Dec-Feb	37.9	2.0	1.1	0.7	41.8	0.7	42.5		
Mar-May	29.6	1.7	0.6	0.6	32.5	-0.8	31.7		
Jun-Aug	21.6	1.1	2.4	1.3	26.4	8.3	34.7		
Mkt. yr.	140.4	10.2	4.76	3.3	158.6	7.4	166.0	84.3	1.97
% Change	17.9	-12.4	-20.0	-13.8	12.9	-22.4	10.7	0.4	10.2
1995/96									
Sep-Nov	44.6	4.5	0.6	0.5	50.2	-2.7	47.5		
Dec-Feb	34.3	1.8	0.4	0.6	37.0	0.4	37.4		
Mar-May	26.6	1.4	0.5	0.4	28.9	-1.8	27.1		
Jun-Aug	13.5	0.2	3.0	1.0	17.7	10.5	28.2		
Mkt. yr.	118.9	7.9	4.5	2.6	133.9	6.3	140.2	85.0	1.65
% Change	-15.3	-22.2	-6.3	-22.0	-15.6	-14.6	-15.5	0.8	-16.2
1996/97									
Sep-Nov	49.4	7.7	0.5	0.4	58.1	-2.1	56.0		
Dec-Feb	37.8	2.8	0.9	0.7	42.2	0.8	42.9		
Mar-May	28.1	1.7	0.4	0.4	30.6	-0.7	29.9		
Jun-Aug	20.9	1.2	2.3	1.3	25.7	10.9	36.6		
Mkt. yr.	136.4	13.3	4.1	2.7	156.5	9.0	165.5	85.3	1.94
% Change	14.7	68.7	-9.1	6.5	16.9	41.5	18.0	0.3	17.6
1997/98									
Mkt. yr.	143.5	10.8	3.8	2.9	160.9	7.5	168.4	88.4	1.90
% Change	5.2	-19.0	-7.2	3.9	2.8	-16.8	1.8	3.7	-1.8

Table 3--Grain shipments and rates

	1995/96 Mkt. Yr.	1996/97 Mkt. Yr.	1996/97 Sept-Oct	1996/97 Oct	1997/98 Sept-Oct	1997/98 Oct
Barge shipments 1/ (Million ton/month)	4/ 3.7	5/ 2.9	NA	NA	NA	NA
Barge rate index 2/ (Dec 1990 = 100)	151.8	108.7	138.8	157.0	138.5	162.5
Railcar loadings 3/ (1,000 cars/week)	27.1	23.3	21.4	24.9	23.1	25.6
Rail rate index 2/ (Dec 1984 = 100)	117.3	6/ 119.7	119.9	123.7	7/	7/

- 1/ Illinois & Mississippi rivers. Includes soybeans and all grains.  
Source: U.S. Army Corps of Engineers
- 2/ Source: Bureau of Labor Statistics
- 3/ Includes soybeans and all grains.  
Source: Agricultural Marketing Service, USDA.
- 4/ 11-months average. 5/ Jan-Jun average. 6/ Sep-Dec average. 7/ Data are discontinued.

Table 4--Cash feed grain prices

	Corn, No. 2, Yel, Ctrl. IL 1/	Corn, No. 2, Yel, Gulf ports 1/	Sorghum, No. 2, Yel Texas South Panhandle 1/	Sorghum, No. 2, Yel, Gulf ports 1/	Barley, No. 2, feed, Duluth 2/	Barley, No. 3 or better, Malting, Minn. 2/	Oats, No. 2, Heavy white, Minn. 2/
Mkt. yr.	\$/bu	\$/bu	\$/cwt	\$/cwt	\$/bu	\$/bu	\$/bu
93/94	2.54	2.85	4.95	4.90	2.05	2.48	1.55
94/95	2.34	2.78	4.75	4.62	2.02	2.75	1.36
95/96	3.91	4.30	7.30	7.19	2.67	3.69	2.28
96/97	2.74	3.07	5.02	5.03	2.32	3.18	2.03
Monthly:							
1996:							
Jul	4.70	5.07	8.35	7.38	2.79	3.74	2.48
Aug	4.48	4.73	7.43	6.89	2.60	3.40	2.36
Sep	3.39	3.69	6.30	5.89	2.34	3.15	2.08
Oct	2.81	3.27	5.08	5.34	2.10	NQ	2.06
1997:							
Jul	2.44	2.69	4.70	4.36	2.04	1.74	1.76
Aug	2.60	2.86	4.97	4.71	2.10	2.66	1.80
Sep	2.61	2.88	4.81	4.69	2.29	2.74	1.78
Oct	2.66	3.05	4.91	5.16	2.05	2.74	1.75

1/ Marketing year beginning September 1.

NQ = No quote.

2/ Marketing year beginning June 1.

Table 5--Selected feed and feed by-product prices

	Soybean meal 44% slv. Decatur, IL 1/	Cotton- seed meal, 41% slv. Memphis 1/	Corn gluten feed, IL pts. 1/	Corn gluten meal, IL pts. 1/	Meat & bone meal, Central U.S. 1/	Dists.' dried grains, Lawrence- burg, IN 1/	Wheat midlgs, Kansas City 1/	Alfalfa farm price 2/ 3/
Mkt. yr.	\$/ton							
93/94	181.82	168.36	88.62	286.61	206.81	123.79	81.51	89.30
94/95	151.77	112.64	82.77	221.95	170.51	106.70	65.04	92.10
95/96	217.27	186.12	116.47	319.35	222.07	151.37	118.08	87.20
96/97	260.38	191.47	93.05	341.50	272.44	142.87	91.18	97.20
Monthly:								
1996:								
Jul	242.30	201.75	109.30	308.50	239.60	175.40	112.70	92.90
Aug	251.10	193.10	111.60	295.00	246.60	NQ	115.80	95.60
Sep	265.50	193.10	115.75	329.40	279.80	164.00	115.40	95.70
Oct	238.00	183.25	102.30	344.00	272.10	160.80	103.20	98.20
1997:								
Jul	261.50	170.75	70.40	337.00	271.41	125.00	61.50	106.00
Aug	261.60	176.25	75.50	345.60	261.00	NQ	69.80	106.00
Sep	265.70	192.00	81.10	355.00	272.10	130.00	80.30	106.00
Oct	216.00	189.10	73.75	343.75	260.40	128.75	89.40	109.00

1/ Marketing year beginning September 1.

NQ = No quote.

2/ Marketing year beginning May 1.

3/ Includes monthly &amp; marketing year revisions from 1994/95.



Table 6--Corn: Food, and industrial uses

Year	HFCS	Glucose and dex.	Starch	---Alcohol--- Fuel	Bev. & Mfg	Cereals & other products	Total F&I
Million bushels							
1994/95							
Sep-Nov	104.6	58.8	57.3	134.4	21.2	32.9	409.2
Dec-Feb	100.5	51.5	55.0	141.5	27.9	32.5	408.9
Mar-May	123.8	58.4	56.2	137.7	24.3	33.3	433.8
Jun-Aug	135.6	62.3	57.3	119.1	26.7	33.3	434.3
Mkt year	464.6	231.1	225.7	532.8	100.1	132.0	1,686.2
1995/96							
Sep-Nov	110.1	60.7	55.8	121.1	32.3	33.2	413.1
Dec-Feb	105.1	52.9	51.5	120.8	37.5	32.8	400.6
Mar-May	130.8	60.7	55.0	91.8	39.6	33.5	411.4
Jun-Aug	136.2	62.8	57.0	61.9	15.6	33.5	367.0
Mkt year	482.2	237.1	219.3	395.7	125.0	133.0	1,592.2
1996/97							
Sep-Nov	115.1	57.4	55.0	96.4	29.0	33.6	386.4
Dec-Feb	110.7	56.3	55.1	109.4	33.0	33.2	397.6
Mar-May	134.8	64.0	59.5	116.6	34.0	33.9	442.8
Jun-Aug	145.1	65.5	59.1	106.3	34.0	33.9	444.0
Mkt year	505.7	243.2	228.6	428.7	130.0	134.6	1,670.8
1997/98							
Mkt year	525.0	250.0	235.0	475.0	133.0	136.0	1,754.0

Table 7--Wholesale corn milling product and by-product prices

	Corn meal, yellow, New York	Brewers' grits, Chicago	Sugar, dextrose, Midwest	HFCS, 42% tank cars, Midwest	Corn starch, fob Midwest 3/
	\$/cwt	\$/cwt	cents/lb	cents/lb	\$/cwt
Mkt. yr. 1/					
93/94	14.49	10.98	25.44	14.63	12.61
94/95	13.22	10.67	25.62	12.27	12.43
95/96	17.79	14.21	25.50	13.01	15.98
96/97 2/	16.94	12.85	25.50	13.15	13.83
Monthly					
1996:					
Aug	21.72	17.62	25.50	13.15	19.19
Sep	20.36	16.26	25.50	13.15	18.50
Oct	17.19	13.11	25.50	13.15	15.41
Nov	16.78	12.70	25.50	13.15	13.58
1997:					
Aug	16.50	12.44	25.50	13.15	13.05
Sep	16.59	12.49	25.50	NA	13.45
Oct	16.68	12.58	25.50	8.30	13.70
Nov 2/	16.50	12.40	25.50	8.30	13.80

1/ Marketing year beginning September 1.

2/ Preliminary. NA = Not available.

3/ Bulk-industrial, unmodified.

Table 8--U.S. feed grain exports by selected destinations 1/

Country/region	-----1995/96-----		-----1996/97-----		1997/98
	Mkt. yr.	Sep	Mkt.yr.	Sep	Sep
-----Thousand tons-----					
CORN					
Japan	15,303	1,276	14,821	873	1,534
Taiwan	5,938	656	5,482	317	444
Former USSR	34	0	131	0	22
South Africa	347	0	81	0	0
Sub-Saharan Africa	321	69	188	0	0
EU	2,842	526	1,704	35	1
Egypt	2,167	206	2,292	144	216
Canada	808	136	833	78	124
China	2,207	749	53	0	0
East Europe	188	0	103	30	0
Algeria	522	0	869	45	105
S. Korea	8,285	1,073	5,321	213	297
Mexico	6,453	429	3,155	243	229
Others	11,077	1,237	10,489	565	628
Total	56,494	6,357	45,523	2,543	3,600
SORGHUM					
Mexico	1,759	290	2,111	164	144
Japan	1,617	150	2,102	149	252
Others	1,591	168	948	85	49
Total	4,968	609	5,161	398	444
-----1995/96-----					
	Mkt. yr.	Jun-Sep	Mkt. yr.	Jun-Sep	1997/98
-----1996/97-----					
Jun-Sep					Jun-Sep
BARLEY					
Saudi Arabia 2/	373	0	88	0	515
Israel	42	42	28	28	0
Jordan	0	0	50	50	0
Japan	522	316	175	72	149
Mexico	190	19	182	89	39
Taiwan	100	33	35	4	60
Others	119	46	220	46	72
Total	1,347	457	779	291	834

1/ Totals may not add due to rounding. Source: Bureau of the Census

2/ For 1997/98, includes unidentified country, until data is revised.

Table 9--U.S. imports by country of origin

Country/region	-----1995/96-----		-----1996/97-----		1997/98
	Mkt. yr.	Jun-Sep	Mkt. yr.	Jun-Sep	Jun-Sep
-----Thousand tons-----					
OATS					
Canada	1,302	534	1,440	309	546
Finland	22	8	99	0	25
Sweden	62	62	140	0	22
Total 1/	1,387	604	1,680	309	593
BARLEY, MALTING					
Canada	740	215	608	148	241
Total 1/	740	215	609	148	241
BARLEY, OTHER 2/					
Canada	141	73	191	56	59
Other	6	5	0	0	0
Total 1/	147	78	192	56	59

1/ Totals may not add due to rounding.

2/ Mainly consists of barley for feeding, and also includes seed barley.

Source: Bureau of the Census