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Feed Outlook

Situation and Outlook Report

FEED OUTLOOK

United States Department of Agriculture

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Economic Research Service

Approved by the World Agricultural Outlook Board

August 13, 1998

HIGHLIGHTS

- o Corn Production for 1998 Forecast at 9.59 Billion Bushels
- o All Hay Production to Drop, but Alfalfa To Increase
- o Ending Stocks of Corn Projected at 1,851 Million Bushels for 1998/99
- o Historical Revision Made in Sorghum FSI Series

ABUNDANT SUPPLIES, LOW PRICES, AND MODEST DEMAND GROWTH MARK OUTLOOK

U.S. feed grain production in 1998 is forecast at 267.8 million metric tons, down about 1 million from a month ago and up 2.6 million from 1997. This reflects relatively small adjustments in forecasts for each of the feed grains. Feed grain supply in 1998/99 is forecast at 312 million tons, down slightly from last month, but 17 million tons greater than in 1997/98. This level of supply would be about the same as 1992/93 and 3 million tons less than 1994/95, both years of record production.

Gains in supply will exceed gains in use in 1998/99. Thus, ending stocks of feed grains will build, projected up more than 10 million tons to 52 million and the highest since 1992/93. Total feed grain use is projected at 260 million tons in 1998/99, an increase of 6.4 million from the previous year, but just 2.3 million more than 1996/97 because of sluggish exports. Domestic use is projected to increase to a new high of 214 million tons, bettering the record 209 million expected in 1997/98.

Large supplies will keep feed grain prices relatively low for the next several months. Despite this, only a modest gain in exports is expected since competing exporters also have large supplies and economic problems in many key importing countries will persist. While attractive prices should help stimulate domestic demand, product prices for many end users are also low, limiting the size of the response. For example, huge supplies of meat and low prices will keep margins low or even negative for many livestock feeders. Ethanol producers using corn as a feedstock will benefit from the low prices, but face weak prices for ethanol stemming from cheap gasoline and competing oxygenates. Also, very low prices for corn gluten co-products are competing with the lowest protein meal prices since the mid-1980's.

CORN FORECAST: SECOND LARGEST PRODUCTION AND THIRD HIGHEST YIELD

Corn production in 1998 is forecast at 9,592 million bushels, down 33 million from last month's projection but 226 million above the final 1997 outturn. This is the first survey-based forecast of the season and it reflects August 1 conditions. The average corn yield is forecast at 130 bushels per acre, compared with the initial, trend-based projection of 129.6 bushels and the actual 1997 yield of 127 bushels. If realized, this would be the third highest yield ever, trailing 131.5 bushels per acre in 1992 and 138.6 bushels in 1994. Production would eclipse the 1992 crop of 9,476 million bushels and rank behind only the 10.1 billion crop of 1994.

Estimated acreage of corn harvested for grain was cut 495,000 acres this month to 73.8 million due to cutting corn for silage and abandonment in many drought areas. Despite the large prospective size of the crop nationally, there are very serious problems in the southern and southeast States due to drought and heat damage, and some smaller, more localized problems in the Midwest, mainly due to excessive moisture. Production in Texas is forecast to decline 18 percent from 1997 while the combined total output of the Carolinas, Georgia, Alabama, Louisiana, and Mississippi is forecast down 16 percent. Over the last 3 years, these States have accounted for just under 6 percent of U.S. corn production. In addition, in Texas and some neighboring States, aflatoxin will severely limit the corn's use for feed and processing.

This year's crop is well ahead of normal, with 96 percent silking by August 9, compared to a 5 year average of 87 percent. With virtually all of the crop through the critical reproductive phase, there is less potential for major yield loss from prolonged heat. Also, this rapid pace suggests there is limited vulnerability to damage from an early frost.

CORN STOCKS EXPECTED TO BE LARGEST SINCE 1992/93

Ending stocks of corn are projected at 1,851 million bushels in 1998/99, up marginally from last month, and up from 1,449 million forecast in 1997/98. This would be the highest since the 2.1 billion bushels of 1992/93. With bumper crops of wheat and soybeans, storage facilities could be taxed in some locations. Ending stocks of wheat are projected to be the highest since 1990/91 and soybeans the highest since 1986/87.

Total use of corn is projected at 9.2 billion bushels in 1998/99, down 25 million from the previous month because prospective food, seed, and industrial use (FSI) was trimmed. This total is up 4.5 percent from the 8.8 billion forecast in 1997/98 and second to 9.4 billion in 1994/95. Although both feed and residual use and FSI use are expected to be record high, exports are likely to remain weak.

SORGHUM CROP TO DECLINE SHARPLY FOR SECOND CONSECUTIVE YEAR

The first survey-based forecast for sorghum indicates production of 529 million bushels in 1998, up 4 million from the previous projection. This is the second consecutive sharp annual decline, given a 1997 crop of 653 million bushels and 803 million produced in 1996. Yields in 1998 are forecast at 67.4 bushels per acre, up from the earlier projection of 64.7 (based on the 1988-97 average) but down from the 69.5 yield of 1997. There were also changes in both planted and harvested acreage this month. Plantings rose 800,000 acres from the June estimate as Texas producers planted land abandoned to cotton and other crops. Nevertheless, the harvested forecast was reduced about 300,000 acres because the severe drought will result in fewer acres harvested in Texas, Oklahoma, and New Mexico.

Despite the very poor prospects for Texas, the outlook for Kansas, the largest producing State, and Nebraska, the third largest, are favorable. As of August 9, 54 percent of the crop was rated good or excellent, compared with 62 percent a year earlier.

Sorghum tends to fare better than corn under stress from heat and dryness, and Texas yields are expected to fall proportionately less but still drop 22 percent. With low acreage, Texas production is forecast at just 106 million bushels, down 80 million from a year ago and the lowest since 1953. This will aggravate local feed shortages given low corn output and a steep drop in hay production, although some of the State's large wheat harvest might work into feed channels.

BARLEY PRODUCTION STABLE

Barley production for 1998 is forecast at 374 million bushels, down 2 million from a month ago and virtually identical to 1997. Yields are expected to average 61.6 bushels per acre, up 6 percent from 1997. Area harvested is estimated at 6.08 million acres, down 5 percent from the 6.43 million acres harvested in 1997. Harvest was progressing well ahead of normal in the major barley States. As of August 9, 36 percent of the crop had been harvested in the major barley States, compared to 10 percent a year earlier.

The 1998 barley crop was rated fair to mostly good condition as of the week ending August 9. Crop development and maturity have been advancing well ahead of normal in many States. The early seeded and fast ripening barley crop in the Great Plain States was showing fewer signs of disease problems compared to recent years.

Final trade numbers for 1997/98 indicated imports of 40 million bushels, a slight increase from last month and exports of 74 million, a slight decline. The 1998/99 barley export forecast was raised 5 million bushels this month to 30 million, but still down nearly 60 percent from the 74 million bushels exported in 1997/98, reflecting fierce competition and weak import prospects.

OATS PRODUCTION FORECAST SLIPS

Oats production for the 1998 crop year is forecast at 177 million bushels, down 6 million from the July forecast, but up 1 million from 1997. If realized, this would be the fourth smallest crop since records were first kept in 1866. The forecast yield, at 60.4 bushels per acre, is 0.1 bushels below last year. Area harvested for grain in 1998 is 2.94 million acres, unchanged from the previous month and 1 percent above 1997. This would be the third smallest acreage harvested for grain on record.

On August 9, 72 percent of the crop had been harvested in the nine primary oat-producing States. Hot weather in early July caused crop conditions to deteriorate significantly in several Corn Belt States and the central Great Plains. Across the northern Great Plains, from Minnesota to Montana, the hot July weather had less impact on the crop and yield forecasts remained unchanged or increased slightly. In Oregon, a record yield was forecast due to nearly ideal temperatures and mostly adequate soil moisture supplies.

Final trade numbers for 1997/98 caused a 7 million bushel decline in oats imports this month from last month's estimate to 98 million, but still the second highest ever. Forecast imports in 1998/99 were also lowered 5 million bushels to 95 million.

ALL HAY PRODUCTION TO DECLINE

All hay production in 1998 is projected to total 148 million tons, down 3.8 million from 1997. Alfalfa hay increased 1 percent from 1997, even though acreage was down from the year before. Other hay production was down 7 percent, primarily because of the drought in the Southwest and the Southeast. Most striking was the decline in Texas where hay production was down 51 percent, mostly because of a 46-percent decline in yields.

Roughage consuming animal units (RCAUs) in 1998/99 are estimated to be down 1 percent from 1997/98. The drought is not only reducing hay production and pastures, it is forcing some cattlemen to sell their herds. Hay supply per RCAU in 1998/99 is 2.31 tons, up from 2.28 tons in 1997/98.

Hay prices have been weaker in 1998/99, in spite of the publicized shortages and high prices in Florida and Texas because of drought. Prices received by farmers for all hay averaged \$94 per ton in May-July 1998, down from \$105 in 1997, even with the decline in production. Alfalfa hay prices in May-July 1998 averaged \$99 per ton, down from \$111 in 1997. Prices received by farmers for hay other than alfalfa and alfalfa mixtures averaged \$75 per ton during May-July 1998, down from \$83 in 1997.

FOOD, SEED AND INDUSTRIAL USE OF CORN TRIMMED

Food, seed and industrial (FSI) use of corn in 1998/99 is expected to total 1,850 million bushels, up 4 percent from 1997/98, but down 25 million from last month's forecast. FSI use may represent 17 percent of total supply, the same as in 1997/98. FSI use in 1998/99 is expected to be up for all the categories, led by corn used for ethanol and high fructose corn sirup (HFCS). However, the forecast of HFCS use was reduced 20 million bushels this month to reflect the slower pace of use in the current (1997/98) year. HFCS use in 1997/98 was trimmed 10 million bushels.

Corn used to make ethanol in 1998/99 may total 510 million bushels, up from an expected 480 million bushels in 1997/98. Even with recent low gasoline prices, ethanol production has remained relatively strong and the industry is optimistic that ethanol use will increase. Ethanol production in 1998/99 is expected to total 1.4 billion gallons, up from an expected 1.3 billion in 1997/98. In fact, two new plants likely to use corn are expect to start production soon. In addition, two plants that were closed for the last few years have been or are being brought back on stream, but one plant may use sorghum, and the other one may use wheat starch.

In 1998/99, corn used for HFCS production is expected to increase 4 percent from the 530 million bushels that may be used in 1997/98. With the U.S. economy strong and employment high, consumers are expected to keep consumption of beverages containing HFCS high. Corn used to make glucose and dextrose in 1998/99 may increase 2 percent from last year's expected 250 million bushels. These sweeteners are used in bakery goods to offset the reduction of fat and this market has matured even though there are some reports of a backlash and a return to products with fat--slowing expected growth. In 1998/99, corn used for starch production may be up 2 percent from a year earlier. The strong economy and paper recycling is expected to keep starch sales strong.

SORGHUM USE FOR FOOD AND INDUSTRIAL REVISED

Sorghum used for ethanol was revised upward this month for most of the 1989/90-1998/99 period. A previous revision (made in 1996) undercounted the amount of sorghum used by several dry-milling ethanol plants. These plants can use either corn or sorghum as a feedstock and selection is influenced by price and availability of the grain.

Based on conversations with sorghum growers associations and some plants that use sorghum, and a review of price data, the food, seed, and industrial use of sorghum has been revised back to 1989/90 and the resulting increased use has been taken from feed use of sorghum. Plant representatives commented that they tended to use more sorghum early in the marketing year and then switch to corn as sorghum supplies are used up. Thus, we incorporated more use in the first two quarters of the marketing year than in the second. As a result of the sorghum change, the quarterly corn use for ethanol also had to be adjusted to reflect the replacement by sorghum.

PRICE OUTLOOK IS WEAK DUE TO BIG SUPPLIES OF FEED GRAINS AND OTHER CROPS

There were no changes in the 1998/99 farm price forecasts for corn and sorghum this month, which remain at \$1.95-2.35 per bushel and \$1.80-2.20 respectively. The season average price for barley was cut by 5 cents to \$1.80-2.20 per bushel, while that of oats was raised 5 cents to \$1.10-1.50.

Weakness in the feed grain markets stems not only from large feed grain supplies, but from declining prices for many other commodities. The price of wheat is forecast at under \$3.00 per bushel and the lowest since 1990/91. Soybean prices are forecast to be the lowest since 1986/87.

For corn, the weather market began to play itself out during the later half of July as confidence in a good size crop increased. At the beginning of the main planting time around mid-April, the December contract at the Chicago Board of Trade had hovered in the \$2.65-2.70 range. Over the next few weeks, it declined but spiked to over \$2.70 at one point in late June. By early August, the corn contract moved down to as low as \$2.20 per bushel. Cash prices have been trending down for most of the summer. The benchmark Central Illinois cash corn price sank to under \$2.00 a bushel at the end of July and early August, for the first time since early November 1994.

If prices continue to weaken, some farmers may consider use of the marketing loan provisions for feed grains to claim loan deficiency payments (LDP), as has recently been the case with wheat. When the posted county price falls below the county loan rate, there is potential for the farmer to receive a LDP. (See May 1998 *Feed Outlook* for background on the Marketing Assistance Program) Even if this is widespread, the loan rate under current legislation does not necessarily represent a price floor, unlike the loan rate under the old farm program. The current national loan rate for corn is \$1.89 per bushel, with county rates varying substantially, depending on transportation differentials and other adjustment factors.

PROJECTED 1998/99 GLOBAL COARSE GRAIN PRODUCTION OFF 5 MILLION TONS

World 1998/99 coarse grain production prospects declined this month, leaving the forecast just slightly above the previous year. Drought and high temperatures in the former Soviet Union and parts of Eastern Europe reduced prospects for corn and spring barley, while earlier excess rains had damaged winter barley. Because of low animal numbers, most of the production reduction is expected to come out of ending stocks and consumption, with only a small increase in imports. Production prospects for China's corn remain unchanged this month because the flooded areas are not in major corn regions and favorable rains outside the flooded areas have likely boosted production prospects enough to offset losses caused by flooding. Forecast 1998/99 world coarse grain trade is largely unchanged this month.

The increased pace of Canada's corn purchases has boosted its 1997/98 import forecast by 300,000 tons to 1.5 million. However, expected EU corn imports are expected down 400,000 tons because of the slow pace of import tender acceptances.

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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										
-----\$/bu-----										
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	369	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	383	1,951	487	2,820	6,903	2.87
Dec-Feb	6,903	---	2	6,905	394	1,492	525	2,411	4,494	2.66
Mar-May	4,494	---	4	4,498	465	1,105	431	2,001	2,497	2.77
Jun-Aug	2,497	---	4	2,500	450	814	353	1,617	883	2.49
Mkt. yr.	426	9,293	13	9,733	1,692	5,362	1,795	8,849	883	2.71
1997/98										
Sep-Nov	883	9,366	2	10,251	429	2,195	380	3,004	7,247	2.52
Dec-Feb	7,247	---	1	7,248	418	1,510	380	2,308	4,940	2.55
Mar-May	4,940	---	4	4,944	464	1,090	350	1,904	3,039	2.44
Jun-Aug	3,039	---	3	3,042	473	756	365	1,594	1,449	
Mkt. yr.	883	9,366	10	10,259	1,785	5,550	1,475	8,810	1,449	2.45
1998/99										
Mkt. yr.	1,449	9,592	10	11,051	1,850	5,750	1,600	9,200	1,851	1.95-2.35
SORGHUM										
1995/96										
Sep-Nov	72	460	0	532	5	172	54	231	301	2.88
Dec-Feb	301	---	0	301	6	66	67	139	163	3.25
Mar-May	163	---	0	163	5	51	36	92	70	3.94
Jun-Aug	70	---	0	70	3	8	41	52	18	3.63
Mkt. yr.	72	460	0	532	19	297	198	514	18	3.19
1996/97										
Sep-Nov	18	803	0	821	15	283	56	354	467	2.45
Dec-Feb	467	---	0	467	15	119	59	193	274	2.26
Mar-May	274	---	0	274	10	85	61	155	119	2.41
Jun-Aug	119	---	0	119	6	37	29	72	47	2.27
Mkt. yr.	18	803	0	821	45	524	205	774	47	2.34
1997/98										
Sep-Nov	47	653	0	701	18	259	49	327	374	2.23
Dec-Feb	374	---	0	374	18	38	83	139	235	2.24
Mar-May	235	---	0	235	12	71	55	139	96	2.16
Jun-Aug	96	---	0	96	6	32	17	56	41	
Mkt. yr.	47	653	0	701	55	400	205	660	41	2.20
1998/99										
Mkt. yr.	41	529	0	569	45	275	195	515	54	1.80-2.20

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										
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	75	109	2.33
Mkt. yr.	100	396	37	532	172	220	31	423	109	2.74
1997/98										
Jun-Aug	109	374	12	496	44	100	24	168	328	2.32
Sep-Nov	328	---	7	335	39	12	39	90	245	2.45
Dec-Feb	245	---	8	253	37	31	6	74	180	2.40
Mar-May	180	---	13	192	53	14	5	72	120	2.27
Mkt. yr.	109	374	40	524	172	158	74	404	120	2.38
1998/99										
Mkt. yr.	120	374	35	530	172	210	30	412	118	1.80-2.20
OATS										
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	71	1.0	96	132	2.08
Sep-Nov	132	---	39	171	22	22	0.8	45	126	1.84
Dec-Feb	126	---	28	154	20	37	0.3	58	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										
Jun-Aug	67	176	19	262	24	81	0.4	105	157	1.61
Sep-Nov	157	---	38	195	22	27	0.7	50	144	1.53
Dec-Feb	144	---	26	170	20	38	0.5	59	111	1.60
Mar-May	111	---	15	127	29	24	0.5	53	74	1.60
Mkt. yr.	67	176	98	341	95	170	2.1	267	74	1.59
1998/99										
Mkt. yr.	74	177	95	346	95	175	2.0	272	74	1.10-1.50

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
1995/96									
Sep-Nov	44.6	4.4	0.6	0.5	50.1	-2.7	47.4		
Dec-Feb	34.2	1.7	0.4	0.6	36.9	0.4	37.2		
Mar-May	26.6	1.3	0.5	0.4	28.8	-1.8	27.0		
Jun-Aug	13.5	0.2	3.0	1.0	17.7	10.5	28.2		
Mkt. yr.	118.9	7.5	4.5	2.6	133.5	6.3	139.9	84.9	1.65
% Change	-15.2	-25.8	-6.3	-21.7	-15.8	-14.6	-15.7	0.7	-16.3
1996/97									
Sep-Nov	49.5	7.2	0.5	0.4	57.7	-2.1	55.6		
Dec-Feb	37.9	3.0	0.9	0.6	42.4	0.8	43.2		
Mar-May	28.1	2.1	0.4	0.4	31.0	-0.7	30.4		
Jun-Aug	20.7	0.9	2.2	1.2	25.0	10.8	35.8		
Mkt. yr.	136.2	13.3	4.0	2.7	156.2	8.9	165.1	85.4	1.93
% Change	14.5	76.4	-10.8	4.0	17.0	39.7	18.0	0.6	17.3
1997/98									
Sep-Nov	55.8	6.6	0.3	0.5	63.1	-3.1	60.0		
Dec-Feb	38.3	1.0	0.7	0.6	40.6	0.0	40.6		
Mar-May	27.7	1.8	0.3	0.4	30.2	0.3	30.5		
Jun-Aug	19.2	0.8	2.5	1.3	23.8	12.2	36.1		
Mkt. yr.	141.0	10.2	3.8	2.8	157.7	9.4	167.1	87.8	1.90
% Change	3.5	-23.6	-5.9	4.5	1.0	6.5	1.3	2.9	-1.6
1998/99									
Mkt. yr.	146.1	7.0	4.6	2.8	160.4	8.2	168.6	87.5	1.93
% Change	3.6	-31.1	22.7	-0.0	1.7	-13.5	0.9	-0.4	1.3

Table 3--Grain shipments and rates

	1995/96	-----1996/97-----		-----1997/98--		
	Mkt. Yr.	Mkt. Yr.	Sept-Jun	Jun	Sept-Jun	Jun
Barge shipments 1/ (Million ton/month)	4/ 3.7	2.8	2.7	4.5	1.4	NA
Barge rate index 2/ (Dec 1990 = 100)	151.8	108.7	112.3	88.8	152.1	94.5
Railcar loadings 3/ (1,000 cars/week)	27.1	23.3	23.5	21.3	22.5	20.7
Rail rate index 2/ 5 (Dec 1984 = 100)	117.3	119.7	119.7	5/	5/	5/

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. NA = Not available.

5/ Discontinued data series and soon to be excluded from this table.

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/
	\$/bu	\$/bu	\$/cwt	\$/cwt	\$/bu	\$/bu	\$/bu
Mkt. yr.							
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
97/98	NA	NA	NA	NA	1.86	2.50	1.70
Monthly:							
1997:							
Mar	2.90	3.25	5.47	5.42	2.22	NQ	1.99
Apr	2.87	3.17	5.21	5.37	2.33	2.73	1.88
May	2.74	3.01	5.04	5.17	2.45	NQ	1.81
Jun	2.59	2.86	4.80	4.75	2.31	2.62	1.89
1998:							
Mar	2.59	2.89	4.85	5.00	1.51	NQ	1.65
Apr	2.41	2.71	4.62	4.69	1.42	NQ	1.54
May	2.37	2.69	4.60	4.58	NQ	NQ	1.58
Jun	2.29	2.64	4.65	4.32	NQ	NQ	1.52

1/ Marketing year beginning September 1.

2/ Marketing year beginning June 1. NA = Not available. NQ = No quote.

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/
	\$/ton							
Mkt. yr.								
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	101.80
Monthly:								
1997:								
Mar	270.40	189.10	100.90	340.00	285.00	148.50	97.10	116.00
Apr	277.70	189.10	95.90	342.50	287.70	136.80	86.40	120.00
May	296.00	193.75	83.60	355.75	277.60	128.50	82.90	112.30
Jun	275.90	190.30	72.25	349.40	279.30	126.90	64.80	115.00
1998:								
Mar	165.30	128.70	69.30	270.50	171.10	107.80	81.00	104.00
Apr	152.75	116.25	64.00	238.10	161.60	87.00	59.25	105.00
May	150.30	105.00	64.60	236.25	158.10	85.50	55.50	108.00
Jun	157.80	126.00	61.90	225.60	161.80	81.00	57.90	96.50

1/ Marketing year beginning September 1. NA = Not available.

2/ Marketing year beginning May 1.

3/ Includes monthly & 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							
1995/96							
Sep-Nov	110.1	60.7	55.8	121.2	32.3	33.2	413.2
Dec-Feb	105.1	52.9	51.5	120.8	37.5	32.8	400.6
Mar-May	130.8	60.7	55.0	92.2	39.6	33.5	411.8
Jun-Aug	136.2	62.8	57.0	61.5	15.6	33.5	366.6
Mkt year	482.2	237.1	219.3	395.7	125.0	133.0	1,592.2
1996/97							
Sep-Nov	113.2	60.0	55.0	91.9	29.0	33.6	382.6
Dec-Feb	110.7	56.3	55.1	106.2	33.0	33.2	394.4
Mar-May	134.8	64.0	59.5	119.2	34.0	33.9	445.4
Jun-Aug	145.1	65.5	59.1	111.4	34.0	33.9	449.0
Mkt year	503.8	245.8	228.6	428.7	130.0	134.6	1,671.5
1997/98							
Sep-Nov	122.8	63.4	59.6	116.1	33.2	34.0	429.1
Dec-Feb	116.8	56.2	56.7	122.2	32.8	33.6	418.3
Mar-May	139.4	60.7	58.3	118.3	33.5	34.4	444.5
Jun-Aug	151.1	69.7	60.4	123.4	33.5	34.4	472.6
Mkt year	530.0	250.0	235.0	480.0	133.0	136.5	1,764.5
1998/99							
Mkt year	550.0	255.0	240.0	510.0	135.0	139.0	1,829.0

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

	Corn meal, yellow, New York	Brewers' grits, Chicago	Sugar, destrose, 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	16.94	12.85	25.50	13.15	13.83
Monthly					
1997:					
Apr	16.94	12.84	25.50	13.15	13.55
May	16.67	12.57	25.50	13.15	13.61
Jun	16.38	12.28	25.50	13.15	13.37
Jul	16.20	12.10	25.50	13.15	13.37
1998:					
Apr	15.74	11.64	30.65	7.25	13.96
May	15.69	11.59	30.65	7.25	13.57
Jun	15.67	11.57	30.65	7.20	13.39
Jul 2/	15.49	11.39	30.65	7.05	13.18

1/ Marketing year beginning September 1.

2/ Preliminary.

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-May	Mkt. yr.	Sep-May	Sep-May

CORN	-----Thousand tons-----				
Japan	15,303	11,782	14,821	11,604	11,060
Taiwan	5,938	4,601	5,482	4,311	3,053
Former USSR	34	50	131	123	22
South Africa	347	347	81	81	0
Sub-Saharan Africa	321	312	188	169	315
EU	2,842	2,632	1,704	1,356	7
Egypt	2,167	1,579	2,292	1,731	1,179
Canada	808	469	833	712	1,069
China	2,207	2,207	53	53	53
East Europe	188	164	378	378	19
Algeria	522	375	869	620	637
S. Korea	8,285	6,847	5,321	4,837	2,279
Mexico	6,453	4,807	3,155	2,379	2,984
Others	11,077	10,294	10,214	8,203	5,433
Total	56,494	46,467	45,523	36,556	28,110

SORGHUM					
Mexico	1,759	1,202	2,111	1,854	2,715
Japan	1,617	1,385	2,102	1,744	1,584
Others	1,591	1,347	948	825	421
Total	4,968	3,934	5,161	4,423	4,720

		-----1995/96---	-----1996/97-----		1997/98
		Jun-May	Jun-May		Jun-May

BARLEY					
Saudi Arabia 2/		373	88		922
Israel		42	28		0
Jordan		0	50		53
Japan		522	175		290
Mexico		190	182		124
Taiwan		100	35		94
Other		119	220		135
Total		1,347	779		1,617

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
	Jun-May	Jun-May	Jun-May	Jun-May	Jun-May

OATS	-----Thousand tons-----				
Canada	1,302		1,440		1,282
Finland	22		99		161
Sweden	62		140		176
Total 1/	1,387		1,680		1,696

BARLEY, MALTING					
Canada	740		608		733
Total 1/	740		609		733

BARLEY, OTHER 2/					
Canada	141		191		112
Total 1/	147		192		143

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