FEED OUTLOOK

United States Department of Agriculture



Approved by the World Agricultural Outlook Board

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HIGHLIGHTS

- o Initial Projections for 2000/01: Supply To Remain Large
- o Total Corn Use Up in 2000/2001
- o Prices To Remain Weak
- o World Coarse Grain Production, Consumption, and Stocks Projected Up In 2000/01
- o U.S. Corn Exports Forecast Up in 2000/01 Because of Reduced Competition from China

CONTINUED LARGE SUPPLIES OF FEED GRAINS

U.S. feed grain production in 2000 is projected at 271 million metric tons, up 3 percent from the 263 million in 1999. The projection reflects higher harvested acreage for corn but lower harvested acreage for the other feed grains. Projected yields are up from last year for corn, barley, and oats but down for sorghum. With increased production and slightly lower carryin stocks, feed grain supplies are projected to increase 2 percent in 2000/2001. Domestic demand will remain strong, and exports are expected to rise modestly, boosting total disappearance 700,000 metric tons from last year. Feed grain stocks are expected to increase, suggesting weaker prices in 2000/2001. Ending stocks are projected at 56 million tons, up from the estimated 50 million in 1999/2000.

Feed grain supplies in 1999/2000 were unchanged this month, but reduced corn exports increased ending stocks and lowered total use. Total feed grain use in 1999/2000 is forecast up 2 percent from 1998/99. Similarly, ending stocks are up from last month's estimate but are still down 3 percent from 1998/99.

FEED AND RESIDUAL USE TO DECLINE IN 2000/2001

Feed and residual use of the four feed grains plus wheat in 2000/2001 is forecast to decline 2 percent from the estimated 168 million metric tons used in 1999/2000. Corn is expected to comprise 88 percent of the total feed and residual used, up from 85 percent in 1999/2000. With intended sorghum plantings down, feed and residual use of that grain is likely to decline 15 percent from the 8.3 million metric tons used in 1999/2000. Wheat feeding in September-August 2000/2001 is also forecast to be down 3.3 million tons from the same period a year earlier.

Feed and residual use per grain consuming animal unit(GCAU) is forecast down 1 percent from 1999/2000's 1.88 tons. Both feed and residual use and GCAU's are expected to be down from 1999/2000. In the GCAU components, poultry numbers are up 3 percent from 1999/2000, hogs are unchanged, but beef and dairy cattle numbers are down. However, with increases in milk production per cow, feed use for the dairy industry will likely be nearly unchanged.

Poultry and egg producers are increasing production in 2000 from 1999 levels. Broiler production is expected to be up 4 percent from 1999, as low grain prices keep costs low and consumer demand remains strong. Producers are expected to continue this trend in 2001 and increase production 5 percent from 2000. Turkey production in 1999 was essentially unchanged from 1998 as low returns discouraged increased production. However, stronger prices for turkeys in 1999 and thus far in 2000 have led to increased placements and expected production. Turkey meat output in 2000 is forecast up 2 percent from 1999. In 2001, production may increase another 1 percent. Egg production increases are also expected to slow because of lower prices. In 1999, egg production was up 4 percent from 1998, when prices were strong. Production in 2000 is expected to be up 2 percent from a year earlier as prices weaken. In 2001, production is forecast to rise 1 percent from 2000.

In spite of reduced calf crops and fewer feeder cattle outside feedlots, cattle placed on feed have remained large. Beef production in 2000 is expected to be down nearly 1 percent from the record 26 billion pounds produced in 1999. With higher prices expected in 2000 and 2001, producers are likely to begin rebuilding herds and reduce numbers available for feeding. In 2001, beef production is forecast down 4 percent from 2000.

Pork production in 2001 is expected to begin turning around from the decline in 2000. In 2000, producers have been responding to low prices in 1998 and 1999 and production is forecast down 3 percent from 1999. The projection for 2001 is essentially for unchanged production from 2000.

CORN PRODUCTION AND ENDING STOCKS TO RISE IN 2000/01

Corn production in 2000 is initially projected at 9,740 million bushels, up 3 percent from 1999, reflecting a increase in planted acres and higher yields. The March Prospective Plantings report indicated producers plan to increase corn seedings by 1 percent to 77.9 million acres. Harvested acreage is projected at 71.1 million acres, based on the planted-to-harvested relationship during 1996-1999, excluding 1998. (Because of unusually large abandonment due to drought damage in 1998, that year was not included in this comparison.)

The average corn yield is projected at 137 bushels per acre, based on a statistical regression equation fit over 1975-99 using a trend variable, July rainfall and temperatures, and planting progress as of mid-May. This is up from 133.8 bushels in 1999, but still 1 percent below the record 138.6 bushels in 1994. To make early-season yield projections with the model, assumptions must be made about planting progress as of mid-May, but July weather is assumed to be average or "normal".

As of May 7, 78 percent of the crop had been planted in the major producing States, much above the 5-year average of 44 percent and last year's 45 percent. In the yield model States (Illinois, Indiana, Iowa, Missouri, and Ohio), 84 percent of the crop had been planted, leading to speculation that by mid-May planting progress might be 90 percent or greater. This advanced pace for planting progress suggests an above-trend expected yield.

An earlier version of the model is detailed in "A Corn Yield Model: Indications for 1996," by Paul Westcott, *Feed Outlook*, FDS-0396, March 1996. The article appears in the Corn Briefing Room on the ERS website at:http://www.econ.ag.gov/briefing/corn/articles/. In May 1999, the model suggested an expected yield of 132-135, compared with the current revised estimate of 133.8 bushels per acre.

Corn supply for 2000/01 is forecast up 3 percent from 1999/2000. The only change made in the 1999/2000 estimates this month was a 1-percent decrease in exports and a

corresponding increase in ending stocks. The increase in 1999/2000 ending stocks plus near record yields, caused 2000/01 supplies to be raised 3 percent from a year earlier.

Total use and domestic use are both forecast up 1 percent to record highs. Feed and residual use of corn is expected to be up 25 million bushels from a year earlier, because of reduced sorghum feeding. Food, seed, and industrial (FSI) use is forecast up 2 percent from 1999/2000. With reduced competition from China, exports are expected to increase 1 percent from the 1,875 million bushels in 1999/2000. Even with record use, ending stocks are expected to increase 11 percent from a year earlier.

FOOD, SEED, AND INDUSTRIAL USE TO CONTINUE GROWING

Food, seed, and industrial (FSI) use in 2000/2001 is expected to increase 2 percent from a year earlier and equal to 17 percent of total supplies, the same as in the last 2 years. High fructose corn syrup use of corn is forecast to increase 3 percent from the 565 million bushels expected to be used in 1999/2000. This is a slower growth rate than in many prior years, but per capita sugar use is already record high. Also, cane and beet sugar prices have declined as supplies increased and the lower prices reduce the price advantage of HFCS.

Glucose and dextrose use in 1998/99 was down from the previous year, but is expected to increase again in both 1999/2000 and 2000/2001. Starch use of corn in 1998/99 was also down from the year earlier but has rebounded in the first half of 1999/2000. Forecast use of corn for starch production is up 4 percent for the year, the same percentage increase reported in the first half of the year. Current efforts by the Federal Reserve to slow the economy are expected to also slow growth in starch use. As a result, corn used to produce starch may increase 2 percent from the expected use in 1999/2000.

Fuel alcohol production was record high in January at 139 million gallons but has declined seasonally since then. In addition, alcohol production in the first half of 1999/2000 was record high at 788 million gallons. Corn used in fuel alcohol production was 1 percent below the record in 1994/95 because of increased sorghum use. Corn used to produce ethanol in 1999/2000 is expected to be up 6 percent from 1998/99's 525 million bushels. There have been many proposed laws that could directly or indirectly affect ethanol production, but based on current laws and regulations, corn use for ethanol in 2000/2001 is forecast to increase 3 percent.

CORN PRICES TO REMAIN WEAK

Prices received by farmers in 1999/2000 to date and assuming normal marketings suggest prices will average between \$1.85 and \$1.95, about the same as the\$1.94 received in 1998/99. Even with increased domestic and foreign demand for corn in 2000/01, average prices received by farmers are forecast between \$1.60 and \$2.00, because of larger ending stocks.

SORGHUM SUPPLY AND USE EXPECTED TO DECLINE

During the first 2 weeks of March, farmers said they intended to plant 9 million acres to sorghum in 2000, down 3 percent from last year and 7 percent below 1998. Using the historical relationship between harvested and planted acres during 1996-99, excluding 1998, gives an estimated harvested acreage of 8 million acres. The estimated harvested acreage would be down 0.5 million acres from 1999, but up 4 percent from 1998, when drought forced large scale abandonments. Yields for 2000 were estimated from a simple linear trend fit over the 1960-99 period.

Sorghum production in 2000 is projected to decline 7 percent from 1999's 595 million bushels. Total supply is forecast down 9 percent from 1999/2000, as both beginning stocks Feed Outlook / FDS-0500 / May 2000 Page 3

and production are lower. Imports of sorghum are generally negligible. Sorghum supply in 1999/2000 was unchanged this month, and up 16 percent from 1998/99.

Sorghum use in 2000/01 is forecast down 10 percent from the expected 615 million bushels used in 1999/2000. The decline results from a decline in supply, forcing some users to shift to corn. Food, seed, and industrial use is expected to be the same as in 1999/2000, with most of the use accounted for by ethanol plants close to sorghum producing areas. Feed and residual use is likely to be down, using whatever is left after export and FSI needs are met. Exports in 2000/01 are forecast to be down 4 percent from the 235 million bushels currently expected in 1999/2000. Exports to Mexico are likely to be weaker in 2000/01 than in the current marketing year. Ending stocks are expected to be up 2 percent from 1999/2000's 45 million bushels.

Average prices received by farmers for sorghum in 2000/01 are expected to average \$1.30-\$1.70 per bushel, compared with \$1.55-\$1.65 in 1999/2000. These sorghum prices would be 81-85 percent of the expected corn prices in 2000/01 and 84-85 percent of 1999/2000 average corn prices. In 1998/99, sorghum weighted average prices received by farmers were 86 percent of corn prices.

BARLEY OUTLOOK: SUPPLY UP AND USE DOWN

Farmers reported intentions to plant 5.7 million acres of barley in 2000, up 10 percent from 1999. Area harvested is estimated by using the relationship between planted and harvested acres in 1997-1999. Projected yields are derived from a simple linear trend fit over the 1960-99 period. In 2000/01, trend yields are 61 bushels per acre, up 3 percent from 1999.

The total barley supply in 2000/2001 is forecast at 462 million bushels, up 3 percent from 1999/2000. All of the increase is caused by production and imports, because beginning stocks are expected to be down 21 percent from the 142 million bushels in 1999/2000. Production is forecast up 3 percent from 1999/2000's 282 million bushels. Imports in 2000/2001 are expected to be up 5 million bushels from the current estimate of 25 million bushels in 1999/2000.

In 2000/01, barley use is forecast at 327 million bushels, down 3 percent from 1999/2000. Among the use categories, only FSI is not expected to be down. FSI use is forecast unchanged from last year at 172 million bushels. Both feed and residual use and exports are expected to be down 5 million bushels from 1999/2000.

Average prices received by farmers in 2000/01 are forecast at \$1.75-\$2.15 per bushel, weaker than the \$2.15 expected in 1999/2000. Forecast average prices for barley in 1999/2000 are stronger than the weighted average of \$1.98 for 1998/99, because of a higher proportion of malting barley. The forecast use of barley in 2000/01 has a higher proportion of malting barley, which is priced at a premium to feed barley.

LOWEST PLANTED OATS ACREAGE SINCE 1866

Acres seeded and to be seeded by U.S. farmers for the 2000 oats crop year are expected to total 4.35 million acres, down 320,000 from 1999. This would be the lowest planted acreage since 1866, breaking the previous record low of 4.64 million acres planted in 1996. Growers expect to harvest 2.47 million acres for grain, 1 percent above 1999. The would be the second lowest harvested acreage on record. Projected yields were derived from a simple linear trend fit over the 1960-99 period, and up two-tenths of a bushel from the 59.6 bushels per acre realized in 1999.

The total oats supply in 2000/01 is forecast down 1 percent from 1999/2000's 328 million bushels. The reduction stems from reduced beginning stocks because production is up 1 percent at 148 million bushels and imports are unchanged from a year earlier.

Total oats use for 2000/01 is forecast unchanged from last year. All of the individual categories are also unchanged from a year earlier. Oats prices received by farmers in 2000/01 are expected to average \$0.90-\$1.30 per bushel. In 1999/2000, average oats prices are forecast at \$1.10, the same as in 1998/99.

HAY DISAPPEARANCE INCREASED IN 1999/2000

Hay stocks on May 1, 2000, totaled 29 million tons, up 16 percent from 1999. In the 1999/2000 May-April hay year, total disappearance (beginning stocks plus production less ending stocks) was 155 million tons, up 4 percent from the previous year. Disappearance per roughage consuming animal unit was up 6 percent from the 2 tons consumed in 1998/99. In March 2000, farmers indicated they intended to harvest 63 million acres, essentially the same as in 1999.

Given estimated livestock numbers, current pasture and range conditions, and hay stocks, prices are expected to remain weak in the 2000/01 hay marketing year. The simple average of all hay prices from May 1999 to April 2000 was \$74.90 per ton, compared with \$83.27 during the same period a year earlier.

U.S. Corn Exports Forecast Up in 2000/01 Because of Reduced Competition from China

U.S. corn exports in 2000/01 (October-September) are forecast at 48.5 million tons, up 2.5 million tons from the previous year. Although world trade is expected to be little changed from a year earlier, the U.S. share is expected to increase. China's corn exports are forecast down 3 million tons. China's entry into the WTO is not assumed because the timing is uncertain. However, reduced production in China and declining world corn prices are expected to reduce China's exports. Argentina is also expected to raise its share of world corn trade as production increases boost exportable supplies. Changes forecast for other corn exporters are mostly offsetting, with Hungary up but South Africa down.

Global imports of corn in 2000/01 are expected to increase slowly because South Korea's outbreak of foot and mouth disease and the resulting restrictions on pork exports will reduce corn imports needed for feeding. Lower imports by South Korea will likely offset much of the slow growth in other importing countries.

U.S. sorghum exports are forecast down slightly in 2000/01. U.S. production and supplies are expected down, but global import demand and export competition remain largely unchanged from the previous year.

Barley is the coarse grain with a significant increase in trade forecast for 2000/01. Imports are forecast up for North Africa and the Middle East because a second year of drought has reduced both production and beginning stocks in Iran, Algeria, Morocco, and Tunisia. The world's largest importer, Saudi Arabia, is expected to maintain imports at the previous year's level. Strong global demand has raised barley prices compared with other coarse grains, limiting some countries' imports. Australia and Canada are expected to boost production and exports. However, the largest beneficiary of increased world barley trade is expected to be the EU, forecast to export a record 10.5 million tons to countries outside the union. At least some EU barley exports are likely to be made without subsidy in 2000/01 because of weak currencies in the EU.

Global coarse grain production is projected up 21 million tons to 896 million. Foreign coarse grain production is forecast up nearly 14 million tons. The former Soviet Union is expected to rebound from last year's drought, boosting coarse grain production 5 million tons, with corn, barley, rye, and oats increasing. The EU is projected to boost coarse grain production 4 million tons, with increased area and record yields boosting corn production. Canada is forecast to increase coarse grain production by nearly 3 million tons, with increased corn and barley area. Coarse grain production in the Middle East is expected to be up marginally. Despite continued drought in Iran and some other countries in the region, Turkey and the other countries in the western part of the Middle East received more rain, boosting barley and corn production prospects. Increased coarse grain production prospects in most regions are partly offset by reduced production in China. China's corn production is forecast down 3 million tons because of reduced area in response to lower support prices.

Foreign corn production in 2000/01 is projected up less than 3 million tons as reduced prospects in China and South Africa partly offset increases in the EU, former Soviet Union, Canada, and Argentina. Foreign barley production is forecast up almost 4 million tons, with the largest increases in Canada, Russia, Turkey, and Australia. Foreign sorghum is expected to increase nearly 2 million tons, mostly in India and Sudan, while foreign oats and rye are each up by over 1 million tons, mostly because of increased production forecast in Russia.

Foreign coarse grain consumption in 2000/01 is projected up 10 million tons to 677 million. Feed use in the former Soviet Union is expected to recover, up 2.5 million tons from the previous year, but low animal numbers will limit growth. The EU is also expected to boost consumption of coarse grains by 2.5 million tons, but increased wheat feeding will limit expansion. In Latin America coarse grain consumption will be up 2.3 million tons, boosted by increased corn feeding in Brazil and Mexico. China is expected to increase coarse grain consumption, especially corn for animal feed and barley for beer, but the increase is expected to be just more than 1 million tons. Coarse grain consumption in South Korea and Japan is expected to decline because of dropping feed needs. In Japan, meat production will drop because of increasing competition from meat imports, while disease problems in South Korea will reduce meat production.

Global coarse grain stocks are expected to expand in 2000/01, with world production outpacing consumption. However, foreign coarse grain stocks are projected down slightly. Foreign production is expected up nearly 14 million tons, while consumption is up only 10 million in 2000/01. However, in 1999/2000 foreign coarse grain stocks are expected to decline about 4 million tons, so the increased production and imports will be just enough to stabilize 2000/01 ending stocks.

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

						Feed & resid.			End. stks.	Farm price
						bushels				
Sep-Nov				10,092	435	2,030	380	2,845	7,247	
Dec-Feb '				7,248	425	1,503	380	2,308	4,940	2.55
Mar-May				4,944 3,042	470	-	350	1,904		2.45
Jun-Aug (3,040		2	3,042	475	865	394	1,734	1,308	2.12
Mkt. yr.	883	9,207	9	10,099	1,805	5,482	1,504	8,791	1,308	2.43
1998/99										
Sep-Nov 1		9,759		11,071			450	3,019	8,052	
Dec-Feb	-			8,058	434	•	465	2,359	5,698	2.04
Mar-May 5			2	5,706 3,618	495	1,097 795	497 568	2,089	3,616	
Jun-Aug (3,616		4	3,010	468	795	200	1,831	1,787	1.80
Mkt. yr.	1,308	9,759	19	11,085	1,846	5,472	1,981	9,298	1,787	1.94
1999/00										
Sep-Nov		9,437		11,228	459	2,210	534	3,203	8,025	
Dec-Feb 8	8,025		3	8,028	447	1,508	468	2,423	5,606	1.89
Mkt. yr.	1,787	9,437	15	11,239	1,930	5,650	1,875	9,455	1,784	1.85-1.95
2000/01										
Mkt. yr.	1,784	9,740	10	11,534	1,975	5,675	1,900	9,550	1,984	1.60-2.00
SORGHUM										
1997/98										
Sep-Nov	47		0	681	18	239	49	307	374	
Dec-Feb	374		0	374	18	38	83	139	235	2.24
Mar-May Jun-Auq	235 96		0	235 96	12 6	71 17	55 24	139 47	96 49	2.16 2.08
0 uII-Aug	90		U	90	O	Δ/	24	4 /	43	2.00
Mkt. yr.	47	634	0	681	55	365	212	632	49	2.21
1998/99										
Sep-Nov	49	520	0	569	15	178	41	234	335	1.67
Dec-Feb	335		0	335	15	34	64	113	222	1.69
Mar-May	222		0	222	10	45	51	106	116	1.73
Jun-Aug	116		0	116	6	5	41	51	65	1.60
Mkt. yr.	49	520	0	569	45	262	197	504	65	1.66
1999/00										
Sep-Nov	65	595	0	660	18	229	65	312		
Dec-Feb	348		0	348	18	29	77	123	225	1.57
Mkt. yr.	65	595	0	660	55	325	235	615	45	1.55-1.65
2000/01										
Mkt. yr.	45	556	0	601	55	275	225	555	46	1.30-1.70
yr.										

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

Vear/	Rea I	Droduc-	Tm_ C	Supply	FCT	Feed &	Ev-	Total	End.	Farm
Qur.	stocks	CIOH	ports			resid.	ports	arsp.	SLKS.	price
BARLEY				Mi.	llion	bushels				· \$/bu
1997/98										
Jun-Aug	109	360	12	482	44	87	24	155	327	2.31
Sep-Nov	327		7	334	39	12	39	90	244	2.45
Dec-Feb	244		8	252	37	29	6	72	180	2.42
Mar-May	180		13	193	53	16	5	74	119	2.26
_										
Mkt. yr.	109	360	40	510	172	144	74	390	119	2.38
1998/99										
Jun-Aug	119	352	7	479	44	101	8	152	326	2.03
Sep-Nov	326		7	333	39	16	8	63	271	1.97
							7			
Dec-Feb	271		6	277	37	32		76	201	1.89
Mar-May	201		9	210	51	12	5	68	142	1.85
Mkt. yr.	119	352	30	501	170	161	28	360	142	1.98
1999/00										
Jun-Aug	142	282	6	429	44	81	9	134	295	2.13
Sep-Nov	295		5	300	39	22	10	71	229	2.04
Dec-Feb	229		9	239	37	24	7	68	170	2.14
Mkt. yr.	142	282	25	449	172	135	30	337	112	2.15
2000/01										
2000,02										
Mle+ 370	112	320	30	462	172	130	25	327	125	1.75-2.15
Mkt. yr.	112	320	30	402	1/2	130	23	341	133	1.75-2.15
OATS										
1997/98										
Jun-Aug	67	167	19	253	17	80	0.4	98	155	1.62
Sep-Nov	155		38	193	17	31	0.7	49	144	1.54
Dec-Feb	144		26	170	15	44	0.5	59	111	1.59
Mar-May	111		15	127	23	29	0.5	53	74	1.60
Mkt. yr.	67	167	98	332	72	185	2.1	258	74	1.60
-										
1998/99										
	74	166	28	268	17	89	0.5	106	162	1.15
Jun-Aug										
Sep-Nov	162		36	198	16	38	0.4	54	143	1.08
Dec-Feb	143		22	166	14	38	0.5	53	113	1.20
Mar-May	113		22	134	22	31	0.3	53	81	1.23
2										
Mkt. yr.	74	166	108	348	69	196	1.7	266	81	1.10
MKC. yr.	/ 1	100	100	340	0,5	100	1.7	200	01	1.10
1000/00										
1999/00	~ -		~ ~	0.45			<u> </u>			
Jun-Aug	81	146	22	249	17	84	0.6	101	148	1.05
Sep-Nov	148		34	182	16	30	0.3	46	136	1.08
Dec-Feb	136		23	159	14	43	0.2	57	101	1.22
200 200	200						0.2	.		
Mle+ see	01	116	100	220	60	100	1 6	250	78	1 10
Mkt. yr.	81	146	100	328	68	180	1.6	250	7.6	1.10
0000/01										
2000/01										
Mkt. yr.	78	148	100	326	68	180	2	250	76	.90-1.30

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		Sorg.	Barley	Oats	Feed Grains				Feed/ animal unit
			- Milli	on metri	c tons			Mil.	Tons
1997/98 Sep-Nov Dec-Feb Mar-May Jun-Aug	38.2 27.5	1.0 1.8	0.6	0.7	58.5 40.5 30.1 25.9	0.0	40.5		
Mkt. yr. % Change	139.2	9.3 -29.3	3.4 -5.6	3.1 7.3	155.0 0.9	8.8 14.5	163.8 1.5		
1998/99 Sep-Nov Dec-Feb Mar-May Jun-Aug	37.1 27.9	1.2	0.7	0.6 0.5	59.3 39.3 29.8 23.4	0.3	39.6 30.7		
Mkt. yr. % Change	139.0 -0.2	6.7 -28.2	3.1 -10.5	3.0 -1.5	151.8 -2.1	6.8 -22.5	158.6 -3.2	88.1 0.1	1.80 -3.3
1999/00 Sep-Nov Dec-Feb						-0.2 1.0	62.8 41.3		
Mkt. yr. % Change	143.5 3.3	8.3 24.0	2.8 -8.7	2.8 -7.2	157.4 3.7	10.8 58.2	168.2 6.1		
1999/00 Mkt. yr. % Change					156.9 -0.4				

Table 3--Cash feed grain prices

	Corn, No. 2, Yel, Ctrl. IL 1/	No. 2, Yel, Gulf	South Panhandle	No. 2, Yel, Gulf	No. 2, feed,	Barley, No. 3 or better, Malting, Minn. 2/	No. 2, Heavy
Mkt. yr.	\$/bu	\$/bu	\$/cwt	\$/cwt	\$/bu	\$/bu	\$/bu
95/96 96/97 97/98 98/99 3/	3.91 2.74 2.45 1.97	4.30 3.07 2.78 2.35	7.30 5.02 4.72 3.78	7.19 5.03 4.76 3.97	2.67 2.32 1.90 1.23	3.69 3.18 2.50 2.30	2.28 2.03 1.70 1.34
Monthly: 1998/1999	:						
Dec Jan Feb Mar	2.08 2.07 2.05 2.09	2.42 2.48 2.40 2.45	3.94 3.79 3.78 3.85	4.12 4.13 4.11 4.16	NQ NQ NQ NQ	NQ NQ NQ NQ	1.31 1.33 1.26 1.35
1999/2000 Dec Jan Feb Mar 3/	: 1.84 1.95 2.03 2.08	2.21 2.36 2.42 2.42	3.36 3.54 3.67 3.19	3.66 4.01 4.07 4.16	NQ NQ NQ NQ	NQ NQ NQ NQ	1.28 1.21 1.19 1.34

^{1/} Marketing year beginning September 1. 2/ Marketing year beginning June 1. 3/ Preliminary. NQ = No quote.

Table 4--Selected feed and feed by-product prices

	Soybean meal 44% slv. Decatur, IL 1/	41% slv.	IL	Corn gluten meal, IL pts. 1/	bone meal, Central	Dists.' dried grains, Lawrence- burg, IN 1/	midlgs, Kansas City	farm price
				\$/ton				
Mkt. yr				Ψ, σσ11				
95/96	217.27	186.12	116.47	319.35	222.07	151.37	118.08	87.20
96/97	260.37	191.47	93.05	341.50	272.44	142.87	91.18	101.80
97/98	186.55	150.40	69.65	290.45	192.56	109.76	76.30	107.00
98/99	130.56	109.86	59.87	234.72	137.32	85.77	54.74	91.00
Monthly	:							
1998/								
Dec	139.60	119.75	74.40	291.50	151.20	78.00	68.10	79.70
Jan	131.00	110.60	75.90	257.50	143.00	87.00	80.10	81.40
Feb	124.40	101.25	62.50	222.50	131.70	97.00	62.00	83.70
Mar	127.20	106.90	56.00	198.00	124.50	92.00	68.50	83.20
1999/	2000.							
Dec	145.40	124.20	59.00	234.40	156.70	88.00	62.80	73.20
Jan	154.96	126.88	55.50	238.75	156.89	85.00	56.13	74.10
Feb	163.55	130.50	51.90	248.50	159.69	82.50	69.50	77.40
Mar 3/	167.00	129.38	51.50	243.13	163.88	73.75	56.30	78.00

Table 5--Corn: Food, and industrial uses

		Glucose and		Alcoh	-	Cereals & other	Total
Year	HFCS		Starch	Fuel		products	
			M:	illion bus	shels		
1997/98							
Sep-Nov	118.4	59.3			33.2		
Dec-Feb	112.5	52.6	59.7				
Mar-May	134.2		61.3			46.0	
Jun-Aug	147.8	60.5	62.0	124.6	33.5	46.0	474.4
Mkt year	512.9	229.2	245.8	481.1	133.0	182.4	1,784.4
1998/99							
Sep-Nov	123.1	56.6	60.8	132.4	31.1	45.9	449.9
Dec-Feb		48.7	57.6	132.9	32.6	45.4	433.8
Mar-May		56.1	60.1		34.1		
Jun-Aug	150.2	57.7	61.2	121.8	29.4	46.4	466.7
Mkt year	530.5	219.0	239.7	525.8	127.1	184.2	1,826.3
1999/00							
Sep-Nov	129.3	56.7	63.6	131.7	31.8	46.0	459.2
Dec-Feb	119.4	49.6	60.0	138.3	33.3	46.0	446.6
Mkt year	565.0	225.0	250.0	555.0	130.1	185.0	1,910.1
2000/01							
Mkt year	580.0	230.0	255.0	570.0	130.6	190.0	1,955.5

^{1/} Marketing year beginning September 1.
2/ Marketing year beginning May 1. 3/ preliminary.

Table 6--Wholesale corn milling product and by-product prices

		Brewers' grits, Chicago	destrose,	•	Corn starch, fob Midwest 3/
Mkt. yr. 1/	\$/cwt	\$/cwt	cents/lb	cents/lb	\$/cwt
95/96 96/97	17.79 16.94	14.21 12.85	25.50 25.50	13.01 13.15	13.83
97/98 98/99 2/	15.94 15.06	11.85 11.00	28.08 24.24	7.77 8.04	13.55 12.28
Monthly 1998/1999:					
Jan Feb Mar	15.13 15.24 15.47	11.03 11.14 11.37	30.65 30.65 25.68	7.95 7.95 8.28	11.95 12.01 12.40
Apr	15.22	11.12	15.75	8.45	12.88
1999/2000: Jan	15.12	11.02	16.38	9.25	11.98
Feb Mar Apr 2/	15.17 15.39 15.28	11.07 11.29 11.18	16.38 16.38 16.38	9.25 9.25 9.25	12.40 12.70 12.91
TPI 2/	13.20		10.30	9.25	12.91

^{1/} Marketing year beginning September 1.

Table 7--U.S. imports by country of origin

Country/region	_	,	1998, Mkt. yr. Jur		
OATS			-Thousand tons-		
Canada	1,282	1,150	1,142	973	1,011
Finland	161	124	216	172	102
Sweden	176	130	443	333	242
Total 1/	1,696	1,432	1,856	1,479	1,355
BARLEY, MALTING					
Canada	733	523	567	376	411
Total 1/	733	523	567	376	411
BARLEY, OTHER 2/					
Canada	112	81	81	71	31
Total 1/	143	81	81	71 	31

^{1/} Totals may not add due to rounding.

Source: Bureau of the Census

^{2/} Preliminary.

^{3/} Bulk-industrial, unmodified.

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

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

Country/region	 Mkt. yr.		19 Mkt. yr.	998/99 SeptFeb.	1999/2000 SeptFeb.
CORN					
Japan	14,581	7,720	15,110	7,396	7,662
S. Korea	3,593		6,462	2,822	2,025
Mexico	4,116	1,417	5,387		2,029
Taiwan	3,801	2,347	4,365	2,098	2,553
Egypt	1,808	1,104	3,159	1,417	2,178
Colombia	1,175	623	1,512	729	904
Venezuela	655	416	1,288	609	489
Saudi Arabia	971	584	1,182	584	629
Algeria	861	495	955	548	458
Canada	1,423	725	867	357	514
Dominican Republic		333	777	346	441
Turkey	379	104	692	72	278
Peru	253	141	674	414	377
Morocco	350	217	592	229	299
Chile	147	147	486	392	517
Former USSR	23	22	405	1	83
China	212	53	204	154	58
South Africa Other Sub-Saharan	0	0 138	143	110	309
EU	336 147	138	298 192	110 191	104 84
East Europe	19	19	192	191	35
Others	2,623		5,464	-	3,354
Others	2,023	1,443	3,404	2,323	3,334
Total	38,117	19,231	50,228	23,196	25,382
SORGHUM					
Mexico	3,222	1,642	3,103	1,325	2,468
Japan	1,650	1,345	1,362		775
Others	463	351	433	348	301
Total	5,334	3,337	4,899	2,588	3,543
		 1997/98		998/99	1999/2000
	Mkt. yr.	Jun-Feb.	Mkt. yr.	Jun-Feb.	Jun-Feb.
BARLEY					
Saudi Arabia	922	922	0	0	0
Israel	0	0	0		0
Jordan	53	53	0		50
Japan	290	284	422	381	344
Mexico	124	98	94		91
Taiwan	94	60	0	0	5
Other	135	93	99	53	80
Total	1,617	1510	615	502	571

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