

Understanding US Weights and Measures

The following section has been added for those (particularly this author) who have difficulty coming to grips with the plethora of measures used in the US for agricultural output and relating them to the metric system.

Bushels

Used in the following WASDE report for reporting on grain crops. The bushel, was originally a *volumetric* measure based on the Winchester bushel developed in England. It contained 2150.42 cubic inches, being the volume of a cylinder 18 ½ inches in internal diameter and eight inches in depth.

The bushel now used in the US is a measure of *weight* rather than *volume*; so a bushel varies with what is being measured – note the differences in bushels for wheat, barley and corn.

Other goods are also measured by the bushel in the US (such as Apples); the weight of each bushel is determined by state laws or local custom and thus may vary from state to state.

GRAIN	# Bushels per metric Ton (1000Kg)
Wheat 60 pound bushel	36.7440
Oats	64.8420
Barley 48 pound bushel	45.9300
Canola/Rapeseed	44.0920
Corn 56 pound bushel	39.3680
Soybeans	36.7440
Sunflower Seed	73.4870

The Ton

The Ton used in the US is 2000 pounds or 907 Kg. It is also called the Short Ton or the Net Ton.

The Imperial ton is actually 2240 pounds; it is called the long ton in the US.

The CWT

CWT stands for hundredweight and in the US it refers to a weight of 100 pounds or 45.35 Kg. This measure is used in the following WASDE report for reporting on rice.

The Imperial hundredweight is 112 pounds.

The following conversion tool may come in handy.

<http://www1.agric.gov.ab.ca/app19/calc/crop/bushel2tonne.jsp>

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<http://jan.mannlib.cornell.edu/reports/waobr/wasde-bb/2003/wasde400.txt> Beginning with today's report, world supply and demand for soybeans and total oilseeds excludes intra-EU trade. Historical revisions are available at <http://www.usda.gov/oce>

WHEAT: Projected U.S. 2003/04 ending stocks of wheat are up 134 million bushels from last month due to a sharply larger supply and only a small increase in expected use. Total wheat production is forecast at 2.311 billion bushels, up more than 40 percent from last year and the largest crop since 1998/1999. Forecast winter wheat production is 90 million bushels above last month due to higher yields.

Supplies are also boosted by larger reported carrying stocks than forecast last month. Projected exports are up 25 million bushels due to larger U.S. supplies, lower U.S. prices, and reduced competition. The projected 2003/04 price range is down 10 cents on each end to \$2.80 to \$3.40 per bushel.

Projected 2003/04 world wheat production is down slightly from last month but use drops more, leaving ending stocks up slightly from last month. Smaller supplies in Ukraine, Eastern Europe, and Pakistan result in higher imports and reduced domestic use, exports, and ending stocks. Russia's smaller crop is reflected in smaller domestic use, while EU exports, domestic use, and ending stocks decline from last month's projections. Canada's exports are increased while North Africa's imports are reduced. Projected global ending stocks are up from last month due to the larger U.S. crop, but are still down sharply from a year earlier.

COARSE GRAINS: The 2003/04 outlook for U.S. feed grains is for bigger crops, rising use, and slightly higher stocks. Projected 2003/04 corn production is up 210 million bushels from last month because crop conditions indicate prospective yields are higher than the trend yields used last month. The projected price range for corn is unchanged from last month at \$1.90 to \$2.30 per bushel.

Forecast U.S. 2002/03 ending stocks of corn are down 75 million bushels from last month due to higher prospective use of corn in ethanol production and a 50-million-bushel increase in feed and residual use.

Global 2003/04 coarse grain supply and use projections are up from last month, largely because of the bigger U.S. corn crop. Foreign coarse grain production is little changed from last month as reductions for Eastern Europe and Ukraine are largely offset by increases for Canada and several other countries.

Lower prospective corn exports for Eastern Europe are offset by increased exports by Brazil from the 2002/03 crop. Brazil's 2002/03 crop is revised up 3 million tons to a record 43.5 million tons.

RICE: U.S. rice production in 2003/04 is projected at 195 million cwt, down 4 million cwt from last month and about 16 million cwt below 2002/03.

Exports in 2003/04 are projected at 87 million cwt, down 1 million cwt from last month and 33 million cwt below the revised 2002/03 estimate. Ending stocks are projected at 17.5 million cwt, down 5 million cwt from last month, about 3 million cwt below the revised 2002/03 estimate, and the lowest stocks since 1980/81. The season-average farm price range for 2003/04 is raised \$1.00 per cwt on each end to \$6.25 to \$6.75 per cwt compared to \$4.18 per cwt for 2002/03.

Global rice production for 2003/04 is projected at 394 million tons, slightly above last month's largely trend-based projection, but nearly 13 million tons above 2002/03. Global consumption for 2003/04 is projected at a record 412 million tons, slightly above last month and 2002/03.

Global consumption is projected to exceed production for the third consecutive year, resulting in a further draw down in stocks to 88.6 million tons, 3.5 million tons below last month, 18.1 million tons below 2002/03, and the lowest stocks since 1984/85. Global exports in 2003/04 are projected at 25.4 million tons, nearly the same as last month, but nearly 2 million tons below 2002/03.

OILSEEDS: U.S. oilseed production is projected at 87.9 million tons, up 4.6 million tons from 2002/03, primarily reflecting increased soybean production. Soybean production is projected at 2.89 billion bushels (78.5 million tons), up 30 million bushels from last month because harvested area reported in the June 30 Acreage report is above the June projection. Increased yields for other oilseeds, especially sunflower seed, will result in modest year-to-year production gains despite lower area.

Total oilseed use for the U.S. is projected to rise modestly for 2003/04 as gains in domestic use are mostly offset by lower exports. U.S. soybean exports are projected at 990 million bushels, up 30 million bushels from last month, but down 40 million bushels from 2002/03. The decline from 2002/03 reflects strong competition expected from anticipated record soybean crops and stocks in South America. U.S. soybean crush is projected to increase only 15 million bushels for 2003/04, reflecting relatively slow growth in domestic soybean meal use and limited soybean meal export prospects.

Global oilseed production for 2003/04 is projected at a record 352.1 million tons, up 24.4 million tons from 2002/03. Foreign oilseed production of 264.2 million tons is up 19.8 million tons from 2002/03. Almost half of the increase in global production is for soybeans, with record crops indicated for Brazil and Argentina at 56 million tons and 37 million tons, respectively.

Combined soybean production for Brazil and Argentina, which trailed U.S. soybean production just two years ago, is expected to exceed U.S. production by over 15 percent.

Expected global production of other oilseeds is up 12.7 million tons, led by sharp increases for rapeseed and cottonseed. Rapeseed production for Canada rises almost 3 million tons due to higher area and a rebound from drought-reduced yields. China's rapeseed production is expected to rise by over 1 million tons to 11.6 million tons. Global cottonseed production for 2003/04 increases by over 3 million tons, with China accounting for about half of the gain.

Global consumption growth of both protein meals and vegetable oils in 2003/04 is expected to exceed 4 percent. Protein demand growth will be driven by strong gains in China and several other Asian and Mideastern countries. Protein meal consumption for China is expected to increase by 8 percent, led by gains for soybean meal.

However, increased oilseed production in China will limit oilseed import growth, with soybean imports projected to reach 18.5 million tons compared with 18.2 million tons in 2002/03. Global vegetable oil consumption is expected to gain 4-5 percent, led by gains in China and in India. India is expected to show a moderate gain in per capita oil consumption after a decline in 2002/03.

SUGAR: Projected U.S. sugar supply for fiscal year 2003/04 is reduced 60,000 short tons, raw value, from last month. Lower cane sugar production in Florida more than offsets higher beginning stocks.

The decrease in Florida production reflects lower-than-expected area intended for sugarcane harvest reported in the June Acreage report. For fiscal year 2002/03, imports under the re-export programs are increased 40,000 tons based on higher-than-expected pace to date.

LIVESTOCK, POULTRY, AND DAIRY: Note: The discovery of bovine spongiform encephalopathy (BSE) in Canada resulted in the United States placing a ban on imports of ruminant animals and products from that country as of May 20. Due to uncertainties as to the length of the ban, the impact of BSE in this report is limited to the impacts of the ban to date. Subsequent estimates will reflect information available at that time.

Total U.S. meat production in 2003 and 2004 is projected higher than last month. Forecast 2003 beef and broiler production is raised but forecast pork production is reduced fractionally. Larger-than-expected cattle slaughter in the second quarter has increased near-term beef production forecasts, and higher forecast placements through the summer are expected to lead to larger beef production in the latter part of 2003 and early 2004. The release of USDA's Cattle report on July 18 will provide a basis for reevaluating beef production into 2004.

Broiler production forecasts for 2003 are raised as heavier bird weights more than offset continued lower egg sets and chick placements.

The 2003 pork production forecast is little changed from last month as higher-than-expected hog slaughter in the second quarter is more than offset by declines in forecast fourth-quarter slaughter.

The June 27 Quarterly Hogs and Pigs report indicated that although producers intend to cut back on production, the rate of decline is less than previously expected. Thus, projected 2004 pork production is raised from last month.

Broiler and turkey production forecasts for 2004 are unchanged. Meat imports for 2003 are reduced. Beef import forecasts in the second and third quarters reflect the cutoff of Canadian beef since May 20. Pork imports are raised from last month for both 2003 and 2004. The meat export forecast for second-quarter 2003 is lowered as beef and poultry exports for the quarter to date are below expectations.

Beef sales to Mexico have been weak and poultry sales to Asian markets are lower than expected. Cattle prices for 2003 and 2004 are forecast lower than last month as higher beef production is expected to limit cattle price gains.

Hog price forecasts for 2003 are higher than last month as strong beef prices supported second-quarter hog prices and the fourth-quarter hog price forecast is raised. Broiler price forecasts are unchanged from last month but turkey price forecasts for 2003 are lowered. Pork and poultry price forecasts for 2004 are unchanged.

Dairy production forecasts for 2002/03 and 2003/04 are lowered from last month as milk-per-cow forecasts are reduced. Cheese prices have risen sharply and are expected to remain above spring levels through the fall. As a result, the 2002/03 Class III price forecast is raised to \$10.15 to \$10.25.

However, due to continued large stocks of butter and surpluses of nonfat dry milk, the Class IV price is not expected to respond much to higher cheese prices. The Class IV price is forecast at \$9.95 to \$10.15 per cwt. The average all milk price forecast is raised to \$11.60 to \$11.70 per cwt. Price forecasts for 2003/04 are little changed from last month.

COTTON: This month's U.S. projections for 2003/04 include lower production and domestic mill use, larger exports, and lower stocks. Beginning stocks are 100,000 bales below last month. Projected U.S. production is reduced 3.5 percent this month to 16.6 million bales, reflecting planted area in the June 30 Acreage report combined with historical average abandonment and yields.

Domestic mill use is cut sharply to 6.8 million bales, as indicators of both current mill activity and textile trade suggest reduced prospects for next season. U.S. exports are raised 2.6 percent due to increasingly tight foreign supplies relative to demand. Ending stocks are reduced to 3.9 million bales, which is 21 percent of total use.

World 2003/04 supply and demand projections show little change from last month. An increase in beginning stocks is about offset by a reduction in world production, which mainly reflects the reduction in the U.S. crop. Likewise, world consumption is little changed as the reduction in U.S. mill use is more than offset by higher consumption overseas. The world trade forecast is adjusted down slightly. World ending stocks, at about 33.0 million bales, are nearly the same as last month and the lowest since 1994/95. For 2002/03, U.S. mill use is reduced 100,000 bales based on recent activity.

Exports are raised 200,000 bales to 11.6 million bales, reflecting atypically strong end-of-season shipments. Accordingly, ending stocks are reduced 100,000 bales. The 2002/03 world estimates include higher production and lower consumption, resulting in an increase of nearly 2 percent in ending stocks. Production is raised in Pakistan, Uzbekistan, and others, partially offset by a decrease for Syria. Consumption is reduced in Brazil, the United States, Taiwan, and others, partially offset by an increase for China.
