

**DAILY SPOT COTTON QUOTATIONS: HOW THEY ARE ESTABLISHED AND THE CHALLENGES
FACED BY USDA, AMS IN ESTABLISHING SPOT QUOTATIONS**

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Introduction

The United States Department of Agriculture (USDA), Agriculture Marketing Service (AMS), Cotton Program establishes and publishes the Daily Spot Cotton Quotations each day that cotton futures are traded on the ICE Futures U.S. Spot quotations have a wide range of uses, including providing a general idea of cotton prices in each market, determining settlement differences for New York Cotton Futures contracts, establishing loan premiums and discounts, and settlement on insurance claims (crop insurance as well as other claims). The goal of this paper is to provide a better understanding of the Daily Spot Cotton Quotations, how they are established, what challenges the Cotton Program's Market News Branch faces in establishing spot quotations and some possible ways to overcome some of the challenges.

To fully understand the Daily Spot Cotton Quotations, they must first be clearly defined. What exactly do the Daily Spot Cotton Quotations represent and how are they established. To do this, you must look at the legislation and regulations that govern their establishment. Next, you must understand how USDA, AMS, Cotton Program collects and analyzes information used in establishing spot quotations. Once you have a better understanding of how spot quotations are established, you are able to see some of the challenges that the Cotton Program's Market News Branch faces each day when establishing quotations.

Defining Spot Cotton Quotations

The U.S. Cotton Futures Act (7 U.S.C. 15b) requires that the U.S. Department of Agriculture establish bona fide spot markets and report commercial differences to be used for settlement of New York Cotton Futures contracts. USDA, AMS fulfills the requirements of the act by publishing the Daily Spot Cotton Quotations. The Code Federal Regulations (CFR) [Title 7 part 27—Cotton Classification Under Cotton Futures Legislation] defines the bona fide markets, establish which markets are to be used for settlement cotton futures contracts, define the qualities that are to be quoted and provides general guidelines for establishing the quotations.

Spot cotton quotations represent the approximate market value of various qualities of cotton, net weight, in mixed lots, free of all charges F.O.B. car/truck which includes compression and any brokerage charges. Spot quotations include prices for the base quality and differences (premiums and discounts) for all other qualities. Spot Cotton includes ANY sale or purchase of cotton. Spot cotton sales include, but are not limited to: producer sales, merchant-to-merchant trading, sales to mills, and cooperative sales to merchants or mills and are not limited to the current crop year's production. . In other words, spot quotation can be defined as the cash price for cotton in a local market. There are seven markets designated as bona fide spot markets.

Bona Fide Spot Markets

Currently, there are seven bona fide spot markets defined by the regulations governing Cotton Classification under Cotton Futures Legislation (Title 7, Part 27 of the CFR). The markets are defined by the growth area of the cotton. They are the Southeast, North Delta, South Delta, East Texas/Oklahoma, West Texas, Desert Southwest, and the San Joaquin Valley.

The Southeastern market includes all counties in the states of Alabama, Florida, Georgia, North Carolina, and South Carolina and all counties in the state of Tennessee east of and including Stewart, Houston, Humphreys, Perry, Wayne, and Hardin counties.

The North Delta market includes all counties in the states of Arkansas and Missouri and all counties in Tennessee west of and including the counties of Henry, Benton, Henderson, Decatur, Chester, and McNairy counties and the

Mississippi counties of Alcorn, Benton, Calhoun, Chickasaw, DeSoto, Grenada, Itawamba, Lafayette, Lee, Marshall, Monroe, Panola, Pontotoc, Prentiss, Tate, Tippah, Tishomingo, Union, and Yalobusha.

The South Delta all counties in the state of Louisiana and all counties in the state of Mississippi not included in the North Delta market.

The East Texas and Oklahoma market includes all counties in the state of Oklahoma and the Texas counties east of and including Montague, Wise, Parker, Erath, Comanche, Mills, San Saba, Mason, Sutton, Edwards, Kinney, Maverick, Webb, Zapata, Star, and Hidalgo counties.

The West Texas market includes all Texas counties not included in the East Texas, Oklahoma and Desert Southwest Markets and the New Mexico counties of Union, Quay, Curry, Roosevelt, and Lea.

The Desert Southwest market includes the Texas counties of Val Verde, Crockett, Terrell, Pecos, Brewster, Presidio, Jeff Davis, Culberson, Hudspeth and El Paso, all New Mexico counties except those included in the West Texas market, all counties in the state of Arizona and the California counties south of and including Riverside and Orange counties.

The San Joaquin Valley market included all California counties except those included in the Desert Southwest market.

The average of the Southeast, North Delta and South Delta averaged, East Texas-Oklahoma, West Texas and Desert Southwest are used for settlement purposes for delivery of tenderable cotton on Futures Contracts.

Qualities Quoted in Bona Fide Markets

The Code Federal Regulations (CFR) [Title 7 part 27 —Cotton Classification under Cotton Futures Legislation] states that in spot markets designated to determine differences for the settlement of futures contracts, the Cotton Program will, on each business day, determine and quote the prices or values of base qualities, as well as the differences for all other qualities deliverable on such contracts. The prices or differences for non-deliverable qualities will be determined and quoted in markets where those qualities are normally produced or traded. In spot markets not designated to determine differences for the settlement of futures contracts, the Cotton Program will, on each business day, determine and quote the prices or differences for all qualities of cotton normally produced or traded in that spot market.

The price for the base quality (color grade 41, leaf grade 4, staple 34, mike 35-36 and 43-49, strength 26.5 to 28.4 grams per tex, and uniformity 80.5 to 81.4 with no extraneous matter) is quoted in terms of its relationship to the current NY futures contract; in other words—basis NY Futures. All other prices are reported as points on or off the base price. Quotations are established for different combinations of color grade, leaf grade, and staple. Additional premiums and discounts are reported separately for mike, strength, uniformity, extraneous matter and prep. Separate bark discounts are quoted only in Texas/Oklahoma markets. The premium (points above the base) and discount (points below the base) represent differences. This results in thousands of quality combinations.

Qualities Quoted in Bona Fide Sport Market, Color, Leaf and Staple					
Color	Leaf	Staple			
		26-29, 30, 31	32	33	34, 35, 36, 37
11 & 21, 31, 41, 51	1-7	ET-OK , WT	SE, ND, SD, ET-OK, WT	SE, ND, SD, ET-OK, WT, DSW	SE, ND, SD, ET-OK, WT, DSW, SJV
61, 71	1-7	ET-OK , WT	SE, ND, SD, ET-OK, WT		
12 & 22, 32, 42, 52	1-7	ET-OK , WT	SE, ND, SD, ET-OK, WT	SE, ND, SD, ET-OK, WT, DSW	SE, ND, SD, ET-OK, WT, DSW , SJV
62	1-6	ET-OK , WT	SE, ND, SD, ET-OK, WT		
13 & 23	1-7	ET-OK , WT			
33	1-7	ET-OK , WT			ET-OK, WT, SJV
43	1-7	ET-OK , WT	SE, ND, SD, ET-OK, WT	SE, ND, SD, ET-OK, WT, DSW	SE, ND, SD, ET-OK, WT, DSW, SJV
53	1-7	ET-OK , WT	SE, ND, SD, ET-OK, WT	SE, ND, SD, ET-OK, WT, DSW	
63	1-6	ET-OK , WT	SE, ND, SD, ET-OK, WT		
34, 44, 54	1-6	ET-OK , WT			

Establishment of Daily Spot Cotton Quotations

Next, you must understand how USDA, AMS, Cotton Program applies the general guidelines of the U. S. Cotton Futures Act to collect and analyze information used in establishing spot quotations. How is information collected and analyzed; when can information other than spot transactions be used and how are the actual quotations established are all questions that need to be answered in order for someone to better understand the process of establishing spot quotations.

The Cotton Program has four area market reporters that contact buyers and sellers daily, either by personal visits or telephone calls. The reporters ask for various types of information (sales and purchases of cotton, interest in buying or selling specific qualities, forward contracting activity, contacts prices for various qualities of cotton, etc). This information includes any spot transactions that have taken place. The most common form this information takes is copies of re-caps that have traded. The re-caps include prices paid, terms of sale, the color, leaf and staple distribution, the number of bales in various mike, strength, and uniformity ranges, and the number of bales of various types of extraneous matter.

Once a reporter has a re-cap, the next step is to compare the price paid for the cotton to the current spot quotations. Because most prices are reported in local terms, some adjustments must be made so that the price reported to the reporter is based on the same terms as spot quotations. For example—the typical terms for sales in West Texas are FOB car/truck, compression charges not paid. Quotations terms are FOB car/truck, compression charges paid. So in order to compare the two—the West Texas price has to be adjusted to quotation terms. This is done by adding the cost of compression to the sale price. For sales in Georgia, (GA Terms-FOB car/truck, compression charges paid, 30 days storage) the cost of one month's storage is subtracted from the price reported.

Next, the reporter compares the price reported (adjusted to quotation terms) to the quotation value of the recap. Then, the recap is combined with others for the reporter to analyze. This is done using an Excel spreadsheet. Below is an example of the how the information is summarized. The reporter analyzes the summaries—taking into account other information from their sources (information on basis levels and prices for individual qualities), identifies trends, and formulates recommendations. The recap summaries, along with any recommendations and pertinent information, are forwarded to the branch office, where the data is reviewed by the Branch Chief or the Assistant Branch Chief. After reviewing and talking to the reporter, the recommendations are approved, disapproved or modified. Approved changes are submitted electronically and incorporated into that day's Daily Spot Cotton Quotations.

TOTAL BALES		2200		AWAY FROM QUOTES		42													
Color	Leaf	32		33		34		35		36 & 37		Color	Leaf	32		33			
		Bales	Diff.	Bales	Diff.	Bales	Diff.	Bales	Diff.	Bales	Diff.			Bales	Diff.	Bales	Diff.		
11 & 21	1 & 2	0	-	0	-	0	-	0	-	0	-	12 & 22	1 & 2	0	-	0	-		
	3	0	-	0	-	0	-	0	-	0	-		3	0	-	0	-		
	4	0	-	0	-	0	-	0	-	0	-		4	0	-	0	-		
	5	0	-	0	-	0	-	0	-	0	-		5	0	-	0	-		
	6	0	-	0	-	0	-	0	-	0	-		6	0	-	0	-		
	7	0	-	0	-	0	-	0	-	0	-		7	0	-	0	-		
31	1 & 2	0	-	0	-	0	-	55	73	0	-	32	1 & 2	0	-	0	-		
	3	0	-	10	92	40	79	57	79	70	-58		3	0	-	0	-		
	4	0	-	0	-	0	-	50	76	150	-58		4	0	-	0	-		
	5	0	-	0	-	0	-	0	-	22	-58		5	0	-	0	-		
	6	0	-	0	-	0	-	0	-	0	-		6	0	-	0	-		
	7	0	-	0	-	0	-	0	-	0	-		7	0	-	0	-		
41	1 & 2	0	-	0	-	0	-	0	-	0	-	42	1 & 2	0	-	0	-		
	3	0	-	168	79	260	79	210	79	115	-37		3	0	-	0	-		
	4	6	92	0	-	550	79	156	80	262	-41		4	0	-	0	-		
	5	0	-	0	-	8	79	0	-	31	-58		5	0	-	0	-		
	6	0	-	0	-	0	-	0	-	0	-		6	0	-	0	-		
	7	0	-	0	-	0	-	0	-	0	-		7	0	-	0	-		
51	1 & 2	In this example, overall prices were 42 points above quotations indicating that when combined the recaps traded at prices higher than the Spot Quotations reported. With overall prices higher, a basis change would be considered, especially with the base quality trading 75 points higher than quotes.										43	1 & 2	0	-	0	-		
	3												3	0	-	0	-		
	4												4	0	-	0	-		
	5												5	0	-	0	-		
	6												6	0	-	0	-		
	7												7	0	-	0	-		
61	1 & 2	There seems to be a level difference between staple 35 and 36 & 37. This is an indication of a change in the price relationship and would probably result in a change to the differences in this area.										43	1 & 2	0	-	0	-		
	3												3	0	-	0	-		
	4												4	0	-	0	-		
	5												5	0	-	0	-		
	6												6	0	-	0	-		
	7												7	0	-	0	-		

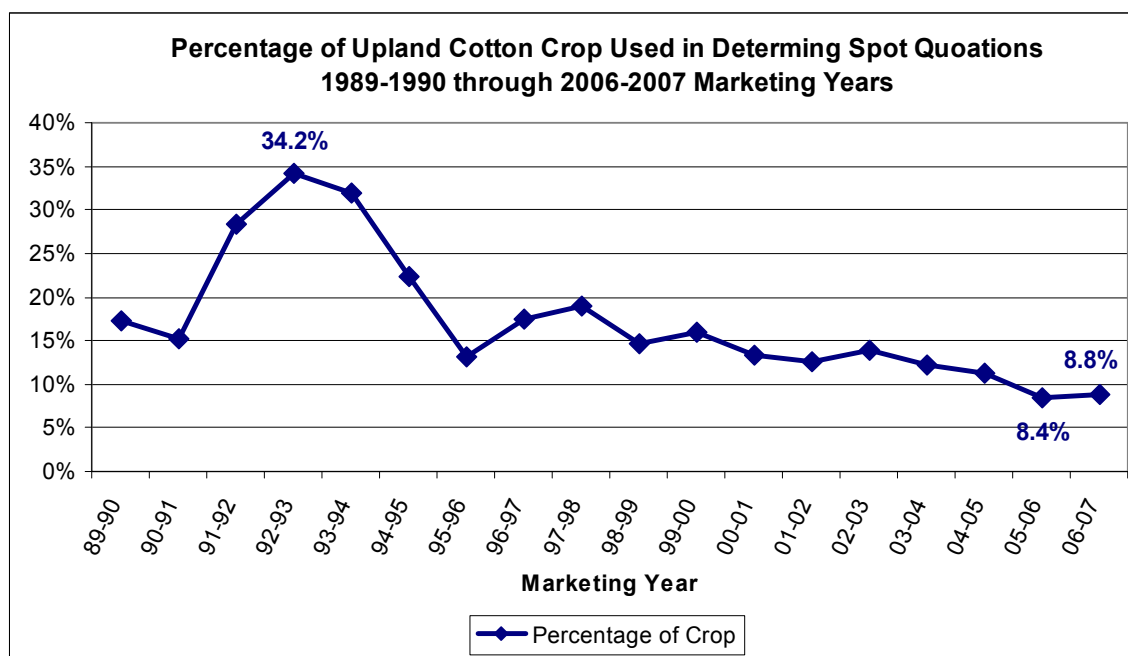
Because of the requirement to release Daily Spot Cotton Quotations each day that cotton futures are traded, there are days that no spot cotton sales are reported in one or more markets. In fact some markets have very few spot transactions reported. Additionally, most days the quality of the cotton sold is limited and not all qualities quoted are actually sold. When there is trading reported, quotations are established by looking at the prices for qualities that are reported. Prices for qualities not reported are based on the established relationship with those that are reported. When there is no trading activity reported, prices based on bona fide bids and offers, sales of hedged cotton, other sales of cotton (sale of CCC Loan Equities), or changes in the price of the futures contract.

Challenges Cotton Market News Faces in Establishing Daily Spot Cotton Quotations

There are several challenges that AMS, Cotton Program, Market News Branch faces when establishing Daily Spot Cotton Quotations including the volume of spot sales reported and changes to the quality of the cotton produced. In addition to the challenges, there is a concern that the current process for calculating the US average quotations does not accurately represent the average spot quotation value with the production distribution in recent years.

Decreasing Volume of Spot Sales Being Report to AMS, Cotton Program

In 1989, the method for establishing Daily Spot Cotton Quotations was changed from utilizing Spot Quote Committees to the USDA, AMS, Cotton Program independently collecting price information and establishing the spot quotations using the process described above. During the 1989-1990 marketing year, 1,993,593 bales, 17.3 percent of the US crop, were reported as spot transactions. Reported spot transactions peaking in 1992-1993 marketing year when 5,368,748 bales, 34.2 percent of the US crop, were reported. Since then, bales reported has declined to 1,831,072 bales or 8.8 percent of the US crop.



The decline in the volume of spot transaction reported can be partially attributed to changes in the way producer market there cotton. Additionally, the information used in establishing quotations is voluntary submitted. While many buyers and sellers do report the spot purchases that they have made, not all do. The Cotton Program is working to increase buyer and seller participation in the process, developing ways to increase awareness of importance of participation, and working with buyers to determine best ways to use non-spot transactions when there is no spot cotton trading. These initiatives are ongoing and should help to increase participation in the spot quotation program.

Changes to The Quality Of The Cotton Produced

As mentioned earlier the Code Federal Regulations (CFR) [Title 7 part 27 —Cotton Classification under Cotton Futures Legislation] defines what qualities must be quoted and what additional qualities can be quoted. With the improvement in quality over the last several years, qualities quoted do not represent quality of cotton currently being produced in the regions. In recent years there has been increases in the percentage of higher color grades and longer staple lengths while there has been a decrease in the percentage of shorter staple lengths (staple 31 and lower), especially in the East Texas-Oklahoma and West Texas Markets. The table below highlights some of the changes in the quality.

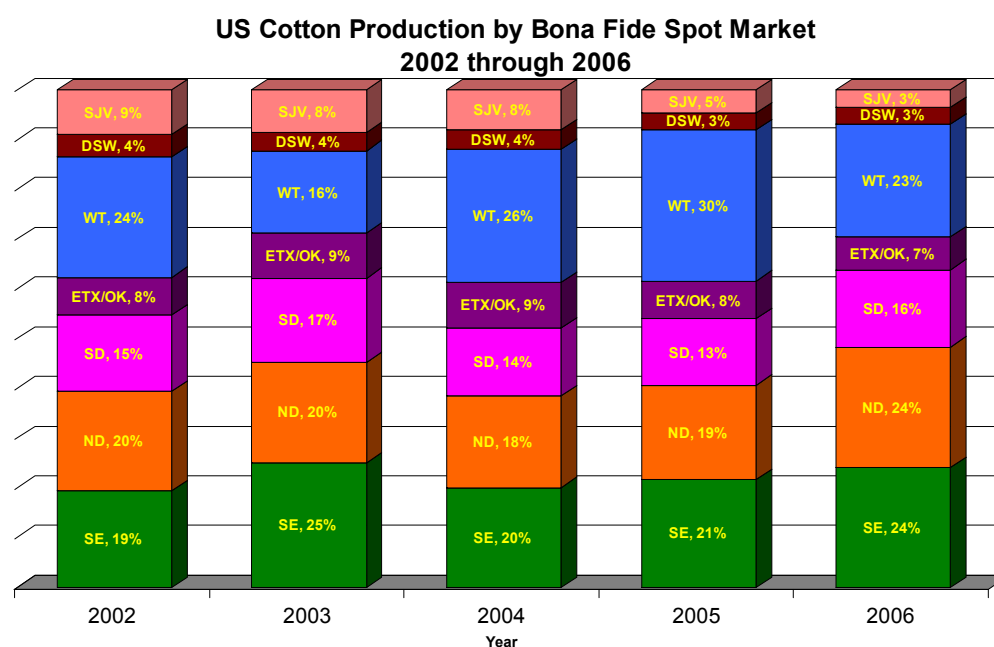
COLOR	2007 Crop Quality Distribution	2002 through 2006 Crop Quality Distribution
11 & 21	31.5%	21.9%
31	18.4%	31.5%
41	31.0%	30.0%
51	39.0%	4.9%
61	*	0.1%
71	*	*
12 & 22	8.0%	0
32	1.4%	2.1%
42	8.1%	4.4%
52	2.9%	2.1%
62	0.1%	0.2%
13 & 23	0.1%	0.1%
33	0.1%	0.4%
43	1.1%	0.7%
53	0.6%	0.3%
63	0.1%	0.1%
Staple	2007 Crop Quality Distribution	2002 through 2006 Crop Quality Distribution
Staple 30 and shorter	0.1%	0.4%
Staple 31	0.7%	1.2%
Staple 32	3.3%	4.0%
Staple 33	9.8%	11.7%
Staple 34	19.9%	24.0%
Staple 35	25.0%	27.9%
Staple 36	19.9%	18.2%
Staple 37	15.6%	9.4%
Staple 38 & longer	6.3%	3.3%

The changes in the quality of the crop in recent years have increased the importance of understanding the price relationships between those qualities that are reported and those that are not seen in spot transactions. In efforts to overcome this challenge, the Cotton Program is evaluating quality results in order to determine which non-

deliverable qualities should be quoted and asking buyers more questions about the price relationships between qualities that are more prevalent and those that are rarely traded. Again, these initiatives are ongoing.

US Average Quotations

Currently the US average spot quotations are based on a simple averaging method. Under this method of calculation, each market's premium or discount accounts for 14.29 percent of the US average for qualities that are quoted in each market. When the quality is not quoted in all markets, the US average quotations are comprised of only those markets that are quoted. For example, staple 31 and shorter are only quoted in the East Texas/Oklahoma and the West Texas markets. The US average would be the average of only those two markets, with each market's premium or discount accounting for 50 percent of the total. This method of calculating the US average spot quotations gives equal weight to all markets that quote a particular quality, regardless of how much of the US crop is produced in each market. The table below shows the percentage of the 2002 through 2006 crops that were produced in each bona fide spot market. To determine the percentages for each bona fide market, USDA, NASS final production data was used to determine the percentage of the crop actually produced in each market. For states that are covered by more than one bona fide spot market, county level data was used.



In looking at how well the US average quotations represent the actual value of the US crop given the current production distribution, it seems that the make-up of the average should mirror the production distribution. The production distribution indicates that markets that represent a large percentage of the US cotton production were being under-represented in the US average while those that produced a small percentage of the US crop were being over-represented. In order for the US average quotations to better reflect the average spot value of the US crop, a weighted average calculation method would result in quotations that better reflect average values of the crop. As a result, in August on 2007, the Cotton Program added a weighted US average spot quotations table to the Monthly Cotton Price Statistics report.

Calculations for qualities that are quoted in all markets are based on the percentages in the previous table. Calculations for qualities not quoted by all markets are based on the distribution of production in only the markets that quote that quality. For example, staple 31 and shorter are only quoted in the East Texas/Oklahoma as an example—in the 2005 crop there were 1,795,900 bales produced in the East Texas/Oklahoma market and 7,002,3000 produced in the West Texas market for a total of 8,768,200 bales produced in the markets that quote staple 31 and shorter.