2006, Annual Georgia Sod Producers Inventory Survey

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In January, the Georgia Sod Producers Association conducted their twelfth consecutive survey of sod producers. The purpose of the survey was to determine the status of inventory levels and projected price changes for spring 2006. Forty-eight producers participated by phone survey, representing farm sizes which were less than 100 acres (3 participants), 100 to 299 acres (14 participants), 300 to 599 acres (18 participants), and more than 600 acres (13 participants).

The survey obtained estimates of the inventory for bermudagrass, zoysiagrass, centipedegrass, St. Augustinegrass, and tall fescue based on estimated sales for the first five months of 2006 as excellent (more than 10% of demand), adequate (equal to demand), and poor (more than 10% shortage). Pricing information included farm price and price for truckload orders to the Atlanta area, all costs were reported as price per square foot of sod.

Bermudagrass is being grown by 98% of the producers, and inventory levels have stabilized over the last 4 years (Figure 1). Sixty-three percent of the producers rated their inventory as adequate to excellent, compared to 78% in 2001. This year's supply shortage of bermudagrass is expected to be similar to last year. For 2006, 35% of all bermudagrass producers projected having less than adequate supplies, compared with 34% last year and 37% in 2004. Forty percent of the larger producers (greater than 300 acres) estimate a shortage of bermudagrass for the first five months of the year, which is a 10% increase from 2005. This may be significant because it is the larger producers that have a greater impact on the overall market.

According to this year's survey, the number of producers growing zoysiagrass increased from 25 in 2005 to 29 in 2006. Of the producers responding, 62% estimate an adequate to excellent inventory which is greater than 2005 (58%). Like bermudagrass projections, 38% of the

zoysiagrass producers project a shortage of grass during early 2006, with 41% of the larger producers having insufficient supply.

Of the 48 producers surveyed 30 (63%) were growers of centipedegrass. Seventy-three percent of the growers had adequate to excellent inventory compared to 63% in 2005, and 64% in 2004. However, producers with greater than 600 acres project a 50% shortfall. This is another example of the larger producers forecasting a minimal supply.

St. Augustinegrass is being grown by 10 of the 48 producers surveyed. Only producers which have greater than 100 acres in turfgrass production had some St. Augustinegrass on their farm. Fifty percent reported adequate or insufficient supply, and no St. Augustinegrass producer anticipates an ample supply.

Similar to the last two years, tall fescue was grown by a similar percentage of producers (25% to 26%). All producers reported excellent to adequate inventory, which continued a two increase in tall fescue supply. This likely indicates that the market for tall fescue sod has met demand.

Relative to last year, there were some price movements for on-the-farm prices and delivered prices (Table 1). In 2005 all the on-the-farm prices fell compared to 2004, however, in 2006 the only species with an average cost lower than 2005 was zoysiagrass. It was 12.3% less the last year while all other species increased in average on-the-farm price. Figure 2 provides a historical perspective of sod prices.

For the third consecutive year, the average price per square foot for a truckload of bermudagrass delivered to the Atlanta area was up (Table 1). The increase from 2005 to 2006 was 5.8% which was a substantial increase compared to 2.0% and 3.4% for 2005 and 2004 respectively. The 2006 survey indicated prices varied from 13.5 cents to 21.0 cents, with an

average price of 16.3 cents (Table 2). The average price in 2005 was 15.4 cents per square foot and ranged from 12.5 cents to 23.0 cents. Interestingly, the upper-end price fell by 2.0 cents but the overall average rose by nearly 1.0 cent.

Similar to bermudagrass, the 2006 average price for a truckload of zoysiagrass delivered to the Atlanta market increased marketability (5.9%). The average price of delivered zoysiagrass in 2006 was 32.4 cents and ranged from 24.0 to 38.0 cents. In 2005 zoysiagrass prices ranged from 22.0 to 40.0 cents and averaged 30.6 cents. From 2005 there was a 16% increase in zoysiagrass producers and, a similar trend as bermudagrass, the upper-end price fell but the overall average was up.

The lowest increase in cost of all grasses delivered to Atlanta was centipedegrass (2.5%), which was down compared to the 2005 increase of 4.2%. Prices in 2006 ranged from 16.5 cents to 27.0 cents and averaged 20.3 cents, compared to 2005 when the average delivered price was 19.8 cents and ranged from 17.0 to 25.0 cents. The overall average price increased as did the upper-end price.

The 2005 Atlanta area delivered price of tall fescue increased (8.2%), which continued a four-year trend of rising prices. This year, prices ranged from 18.0 cents to 31.0 cents, with an average of 25.0 cents compared to 23.1 in 2005, 22.0 in 2004, 20.2 in 2003, 19.8 cents in 2002 and 20.0 cents in 2001.

This was the second year St. Augustinegrass was included in the survey and it had the greatest overall increase from the previous year (10.7%). The average price of delivered St. Augustinegrass in 2006 was 31.0 cents and ranged from 27.0 to 36.0 cents. In 2005 St. Augustinegrass prices ranged from 24.0 to 33.0 cents and averaged 28.0 cents. There was a 3.0 cent increase for all factors, average, low- and upper-end prices.

For the second year, producers were asked if they charge a premium for certified turfgrass. It is surprising the number of producers charging extra fell from 33% in 2005 to 23% this year. The remaining 77% either do not place an added value on certified sod or do not participate in the certification program. The extra cost ranged from one cent to two cents per square foot. Because of royalty fees for exclusivity rights and increased production costs for the producer, higher prices for the insurance of varietal purity should be expected by the consumer. As varietal inconsistencies (e.g. 'Tifway' bermudagrass, 'Emerald' zoysiagrass, St. Augustinegrass) continue to plague landscapers and homeowners start requesting certified grass this trend will likely change as producers realize the added value of certified turfgrass.

Regarding grower price expectations, 48% expect bermudagrass prices to remain unchanged while 52% expect an increase. This is a shift from last year where 71% expected constant prices with 29% anticipating an increase. Sixty percent of the zoysiagrass and centipedegrass producers expect prices will not change. With on-the-farm zoysiagrass prices remaining steady for several years and falling in 2006 (Table 1), a greater percentage of producers (40%) anticipate prices to rise in 2006 compared to last year (20%). Likewise, 40% of the centipedegrass producers foresee increased prices this spring. An equal percentage (46%) of tall fescue producers expect prices to either remain steady or rise and one producer anticipates a price decrease. Interestingly in 2005 all St. Augustinegrass producers expected prices to remain steady, yet this was the species with the greatest increase in delivered prices. Sixty percent of St. Augustinegrass producers expect constant prices while 30% anticipate further increases for 2006.

Freight rates per mile shipped to Atlanta increased for 2006 (Table 3). Costs ranged from \$1.80 to \$3.35 and averaged \$2.31; this is an 18.5% increase from the 2005 average (\$1.95) and higher than the 2003 average (\$1.82). Respondents which included freight costs (77%) as a part

of price quotes for customers fell from 93% in 2005. Fewer producers (40%) are charging an unloading fee on first drops for 2006 than in 2005 (65%). Although the minimum unloading fee increased to \$32.50 in 2006, compared to \$25 in 2005, most producers will charge between \$50 and \$75. Ninety-four percent of the participants make additional drops on a load with 3 producers not charging for additional drops and the remainder charging from \$25 to \$50, the average charge was \$37.70 which was about the same as 2005 (\$37.11) but still not as high as 2003 (\$39.57).

To account for increases in fuel costs half of the producers charge a fuel surcharge, this is up considerably from 2004 where only 26% of the producers reported adding this charge. This year, surcharges ranged from \$25 to \$140 per load and averaged \$78. This is a big change from 2005 where the range was \$25 to \$50 per load with an average of \$32.14. This great of increase is likely a direct reflection of rising fuel costs. In metro-Atlanta, from January 2005 to January 2006 the average cost of unleaded gasoline rose nearly 25%, with higher fluctuations due to hurricanes Katrina and Rita in September. Therefore, it is understandable that more producers are charging fuel surcharges and prices are higher as costs have increased.

To sustain the turfgrass production industry there are economic factors which suggest a continued need for turfgrass sod. According to the Atlanta Journal-Constitution, there are several planned developments ranging from 300 to over 800 homes for 2006. These developments are planned on 500 to 600 acre parcels in several outlying counties and include recreational areas and green space. Also, the approval of the Beltline, a 22-mile loop of transit, trails, parks, and housing around inner-Atlanta, is proposed to stimulate \$20 billion in development of 2,000 acres over the next 20 years. Theses are opportunities for turfgrass as amenity and conservation purposes.

The reoccurring theme of this year's survey is that a large number of producers, especially

growers with more than 300 acres, anticipate a shortage of marketable grass early in the 2006 season and further increases in price. This may likely be attributed to increased production costs, especially the costs associated with harvest and delivery. Fuel costs will dictate delivery charges, which will be expressed as higher freight rates, unloading fees, or fuel surcharges. As with many products, these increased expenses will be passed along to the consumer.

Table 1. Change in prices from 2005 to 2006.

	On-the-farm			Delivered to Atlanta*		
			%			%
Turfgrasses	2005	2006	Change	2005	2006	Change
	Cents	/ ft ²		Cents	/ ft ²	
Bermudagrass	11.4	12.4	8.8	15.4	16.3	5.8
Zoysiagrass	24.4	21.4	-12.3	30.6	32.4	5.9
Centipedegrass	15.1	14.8	2.0	19.8	20.3	2.5
Tall Fescue	18.0	20.6	14.4	23.1	25.0	8.2
St. Augustinegrass	21.9	24.9	13.7	28.0	31.0	10.7

^{*} Delivered price includes freight and pallets.

Table 2. Comparison of on-the-farm prices with delivered prices, 2006.

On-the-farm			Delivered to Atlanta Area*			
_	Price	_	Price	_		
Turfgrasses	(avg.)	Range	(avg.)	Range		
Cents / ft ²						
Bermudagrass	12.4	9.0 - 20.0	16.3	13.5 - 21.0		
Zoysiagrass	21.4	20.0 - 35.0	32.4	24.0 - 38.0		
Centipedegrass	14.8	12.0 - 25.0	20.3	16.5 - 27.0		
Tall Fescue	20.6	17.0 - 25.0	25.0	18.0 - 31.0		
St. Augustinegrass	24.9	20.0 - 30.0	31.0	27.0 - 36.0		

Delivered price includes freight and pallets.

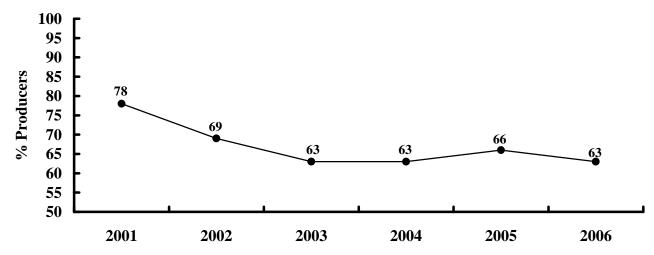
Table 3. Historical freight rate for deliveries to Atlanta.

Year	Range	Average	% Change			
	\$ / mile					
2006	1.80 - 3.35	2.31	18.5			
2005	1.25 - 3.57	1.95	17.5			
2004	1.14 - 2.00	1.66	-8.8			
2003	-	1.82	-			

Delivered price includes freight and pallets.

Figure 1. Percentage of bermudagrass producers projecting adequate to excellent supply for the past six years.

Projected Adequate to Excellent Bermudagrass Supply



^{*} Projected supply for the first 5 months of the calendar year.

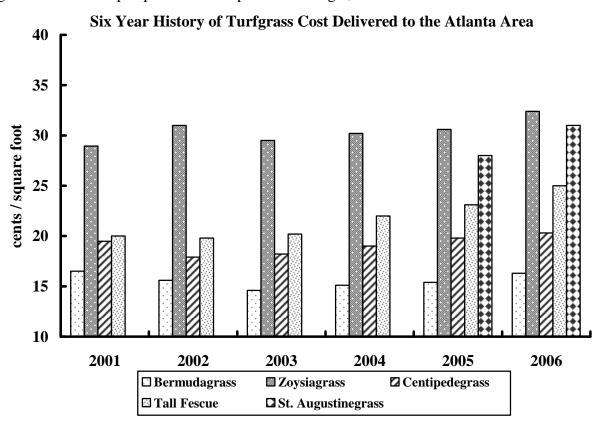


Figure 2. Historical perspective of sod prices in Georgia, 2001 to 2006.