

2011, Annual Georgia Sod Producers Inventory Survey

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In January, the Georgia Sod Producers Association conducted their seventeenth consecutive survey of sod producers. The purpose of the survey was to determine the status of inventory levels and projected price changes for spring 2011. Forty-six producers participated by telephone and written / fax survey, representing farm sizes which were less than 300 acres (31 participants), 300 to 600 acres (9 participants), 601 to 900 acres (3 participants), and more than 900 acres (3 participants). Previously there was a 901 to 1,200 acres category but since there were no respondents in 2010, this group was accounted in the greater than 900 acres group.

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 2011 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 or within 100 miles of the farm, all costs were reported as price per square foot of sod.

Bermudagrass is being grown by 89% of the surveyed producers. Inventory levels had stabilized through the early part of the decade then increased in 2008 and are expected to increase further (Figure 1). Ninety-five percent of the producers rated their inventory as adequate to excellent this year. For 2011, 5% of all bermudagrass producers projected having less than adequate supplies, compared with 12% last year and 9% in 2009. Three growers, same as 2009 and 2010, with greater than 900 acres expect adequate to excellent supplies. Likewise, 8 of the 9 producers surveyed with 300 to 600 acres project a sufficient supply.

According to this year's survey, the number of producers growing zoysiagrass (50%) was

a decrease from 2010 (57%). Of the producers responding, 78% estimate an adequate to excellent inventory which continues an increase in supply from 2008. For early spring 2011, 22% of the zoysiagrass producers project a shortage of grass, all of which are producers with less than 900 acres. All of the producers with greater than 900 acres in production anticipate an ample supply of zoysiagrass.

Of the 46 producers surveyed 30 (65%) were growers of centipedegrass. Eighty-three percent of the growers had adequate to excellent inventory compared to 100% in 2010, and 80% in 2009. Seventeen percent of the centipedegrass growers anticipate a shortage during 2011; growers with less than 600 acres comprise the majority (13%) of these producers. It appears the adjustments made six years ago by larger producers continue to meet market demand.

St. Augustinegrass is being grown by 10 of the 46 producers surveyed. Unlike previous years where only the larger producers had inventories, this is the third year each of the lower two categories also had a growers of St. Augustinegrass. Of the producers, 70% reported adequate supply. Overall, three growers with less than 300 acres forecast a St. Augustinegrass shortage, while the three growers with greater than 600 acres in turfgrass production have an adequate supply.

Similar to previous years, tall fescue was grown by a similar percentage of producers (25% to 34%). All tall fescue producers reported excellent to adequate inventory, which continues a seven-year trend of sufficient tall fescue supply. This strengthens the assessment that the amount of tall fescue sod grown in Georgia meets demand.

For 2011, the on-the-farm prices for bermudagrass, zoysiagrass, and centipedegrass had less than 3% change from 2010 prices, 2.6%, -0.4%, and -2.6% respectively (Table 1). Similarly, there was little change in the delivered price for bermudagrass and centipedegrass, 1.2% and 2.7%

respectively. Delivered zoysiagrass, tall fescue, and St. Augustinegrass fell, -3.1%, -3.6%, and -3.2% respectively. It is interesting the on-the-farm prices for tall fescue and St. Augustinegrass rose 4.3% and 3.7% respectively but the delivered price fell -3.6% and -3.2% respectively.

Figure 2 provides a five year historical perspective of sod prices.

The average price per square foot for a truckload of bermudagrass delivered to the Atlanta area, or within 100 miles of the farm, increased slightly from the previous year (Table 1). This year's average delivery price was the same as the 2006 price and similar to the 2009 and 2010 price (Figure 2). The 2011 survey indicated prices varied from 12.0 cents to 26.0 cents, with an average price of 16.3 cents (Table 2). The average price in 2010 was 16.1 cents per square foot and ranged from 13.5 cents to 24.0 cents.

The 2011 average price for a delivered truckload of zoysiagrass decreased from 2010 levels. The average price of delivered zoysiagrass in 2011 was 31.1 cents and ranged from 18.0 to 40.0 cents. In 2010 zoysiagrass prices ranged from 24.0 to 38.0 cents and averaged 32.1 cents. Previous to 2008, zoysiagrass producers predicted shortages which likely lead to price increases. The current four-year trend of predicted sufficient supplies has likely lead to lower prices.

Reversing a three-year trend of falling centipedegrass prices, prices rose (2.7%) in 2011. Prices in 2011 ranged from 14.0 cents to 24.0 cents and averaged 18.7 cents, compared to 2010 when the average delivered price was 18.2 cents and ranged from 13.0 to 30.0 cents. While centipedegrass rose in 2011 they are still -12% lower than 2007 prices (21.3 cents).

The 2011 delivered price of tall fescue fell (-3.6%), which reversed last year's 14.7% increase in price from the previous year. This year, prices ranged from 20.0 cents to 30.0 cents, with an average of 24.0 cents. The low-end price remained constant but the upper boundary decreased 6.5 cents from 2010.

Reversing a two-year increase, the price of delivered St. Augustinegrass fell in 2011. This year's loss (-3.2%) almost negates last year's 4.1% increase from 2009. The average price of delivered St. Augustinegrass in 2011 was 27.2 cents and ranged from 22.0 to 32.0 cents. In 2010 St. Augustinegrass prices ranged from 21.0 to 32.3 cents and averaged 28.1 cents. 2005 was the first year St. Augustinegrass was included in this survey, during that time prices have varied wildly compared to other species (e.g. bermudagrass). There have been years with a 10.7% increase from the previous year, to years like 2008 where prices fell -17.5%.

Regarding grower price expectations, 76% expect bermudagrass prices to remain unchanged while 5% expect a decrease. Twenty percent of bermudagrass producers foresee a bermudagrass price increase during the first five months of 2011. This is an increase from 2010 where 75% expected constant prices while 10% anticipated an increase. For zoysiagrass, 35% of producers anticipate rising prices during the first five months of 2011, while 9% forecast a decrease. Most St. Augustinegrass and tall fescue producers anticipate constant prices, 70% and 69% respectively. Seventy-three percent of centipedegrass producers expect prices to remain unchanged; however, an equal amount (13%) predict an increase or decrease in price. Considering the "big 3" species (i.e. bermudagrass, centipedegrass, and zoysiagrass), fewer growers (9%) anticipate declining prices in 2011. This estimate is down from 17% and 28% in 2010 and 2009 respectively.

Down from 2009, 2011 had 30 producers representing 65% of the respondents with some certified grass on their farm (Table 3). Forty percent of these growers charge a premium for certified grass. The remaining growers either do not place an added value on certified sod or do not participate in the certification program. In 2011, the typical extra cost ranged from 1.0 to 5.0 cents per square foot and averaged 1.6 cents, up from 1.1 cents in 2008 and 2007. 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. With varietal inconsistencies (e.g. 'Tifway' bermudagrass, 'Emerald' zoysiagrass, St. Augustinegrass) continuing to plague landscapers and homeowners, hopefully the market will continue to pay a premium price for a premium product.

Freight rates per mile shipped to Atlanta, or within 100 miles of the farm, decreased for 2011 (Table 4). Costs ranged from \$1.00 to \$4.00 but averaged \$2.60; this is a -3.7% decrease from the 2010 average (\$2.70). Respondents which included freight costs (83%) as a part of price quotes for customers remained constant with 2010 (82%). An increasing number of producers are charging an unloading fee on first drops. Seventeen respondents, 37%, reported charging an unloading fee in 2011. In 2010, 27% of the producers charged for the first drop. The minimum unloading fee (\$35) remained constant in 2011 but most producers charge between \$50 and \$75. Nearly all producers (89%) will make additional drops on a load. The low-end charge was constant at \$20 in 2011. The high-end charge increased to \$85 from 2010. The average cost for additional drops in 2011 was \$44.38, an increase from 2010 (\$43.40).

Continuing a three year decline, 9% reported adding a fuel surcharge to a load in 2011. In 2009 the number of producers adding this charge was 28% which was down from 46% in 2008. This year, the average surcharge was \$41.70 per load. Figure 3 compares the average sod price for all species grown with the average annual retail price for gasoline and diesel fuel. Not surprising, the greatest fuel surcharge corresponded with the highest fuel rates.

While fuel surcharges can offset increased fuel costs associated with delivery, it is interesting how disproportionate increased sod prices are in relation to increased fuel prices (Figure 3). During the decade average sod prices rose 13%, whereas diesel fuel costs rose 119%

(\$1.35 to \$2.95 / gallon) between 2001 and 2010, spiking at \$3.81 (182%) in 2008. Fuel being only one input for sod production (e.g. labor, fertilizer, pesticides, etc.), it is difficult to see how producers are keeping track with rising costs. It would not seem the average increase in price from 21.2 to 23.9 cents per square foot within a ten year period is sustainable.

The 46 producers that participated in this survey estimated that the highest amount of sod was sold to landscape contractors (43%), about the same percentage as last two years (Table 5). The average percentage of sales to homeowners remained constant in 2011 at 16%, the third consecutive year this group held the number 2 position. Garden centers took the third position in this year's survey and saw the greatest gain from a year ago when it was ranked 7th. This year garden centers are expected to account for 11% of sales. In 2008, brokers were the second largest industry segment for sale of turfgrass, but in 2011 this group accounted for 5% of sales, maintaining their rank at 6th for two years.

In the last two year's survey, amid reports of farms being sold, acres being taken out of turfgrass production, and long-time producers going out of business, ancillary questions were included. The first was "Did you reduce sod production (acres) in 2010 due to the economy?" Last year 40% of the respondents answered that they removed some acreage on their farms. On this year's survey 48% responded that they had removed turfgrass acreage from production. The second question was "are additional reductions expected in 2011?" The average grower expected removing 30% of their acreage from sod production in 2009. In 2010, the average decreased to 17% but, has increased to 36% for 2011. The anticipated reductions may range from 8% to 80%. This year growers were asked "if they had increases in acreage anytime during the past three years?" Eleven percent indicated adding additional production since 2008. The mode (i.e. most common response) for "how much" was 3 of the 5 respondents adding 15% more turfgrass

production with the overall average being a 25% increase.

While prices remain repressed relative to a few years ago and inventory levels appear to be adequately sufficient the story to this year's survey is "constant". However, more producers anticipate increasing prices during spring 2011, this may be a response to increased fuel prices and an attempt to account for increased costs of production. Compared to the 2010 sod producer's survey, this year's results forecast a year much like last year. If predictions come to fruition, 2012 may be a year with fewer acres in production as this industry struggles to sustain itself.

Table 1. Change in prices from 2010 to 2011.

Turfgrasses	On-the-farm			Delivered*		
	2010	2011	% Change	2010	2011	% Change
	----- Cents / ft ² -----			----- Cents / ft ² -----		
Bermudagrass	11.7	12.0	2.6	16.1	16.3	1.2
Zoysiagrass	26.1	26.0	-0.4	32.1	31.1	-3.1
Centipedegrass	15.2	14.8	-2.6	18.2	18.7	2.7
Tall Fescue	18.4	19.2	4.3	24.9	24.0	-3.6
St. Augustinegrass	21.7	22.5	3.7	28.1	27.2	-3.2

* Delivered price includes freight and pallets. In 2011, the delivered price included the Atlanta area or within 100 miles of the farm.

Table 2. Comparison of on-the-farm prices with delivered prices, 2011.

Turfgrasses	On-the-farm		Delivered*	
	Price (avg.)	Range	Price (avg.)	Range
	----- Cents / ft ² -----			
Bermudagrass	12.0	8.0 – 22.0	16.3	12.0 – 26.0
Zoysiagrass	26.0	15.0 – 33.0	31.1	18.0 – 40.0
Centipedegrass	14.8	11.0 – 20.0	18.7	14.0 – 24.0
Tall Fescue	19.2	15.0 – 27.0	24.0	20.0 – 30.0
St. Augustinegrass	22.5	15.0 – 30.0	27.2	22.0 – 32.0

* Delivered price includes freight and pallets. In 2011, the delivered price included the Atlanta area or within 100 miles of the farm.

Table 3. Percentage of survey respondents that grow certified grass and the additional charge for certified grass.

Year	Growers with Certified Grass		Growers that charge a premium for Certified Grass			
	%	n*	%	n*	Average	Range
					----- cents -----	
2011	65	30	40	12	1.6	1.0 – 5.0
2010	70	31	48	15	1.5	1.0 – 3.0
2009	69	36	51	18	1.4	0.5 – 4.0
2008	81	26	65	17	1.1	1.0 – 2.0
2007	69	33	38	13	1.1	0.5 – 2.0

* Total number of respondents 46, 44, 52, 32, and 48 for 2011, 2010, 2009, 2008, and 2007 respectively.

Table 4. Historical freight rate for sod deliveries.

Year	Range	Average	% Change
	----- \$ / mile -----		
2011	1.00 – 4.00	2.60	-3.7
2010	1.00 – 6.00	2.70	-17.7
2009	1.85 – 7.00	3.28	7.2
2008	2.45 – 6.00	3.06	-16.2
2007	1.00 – 5.00	3.65	58.0

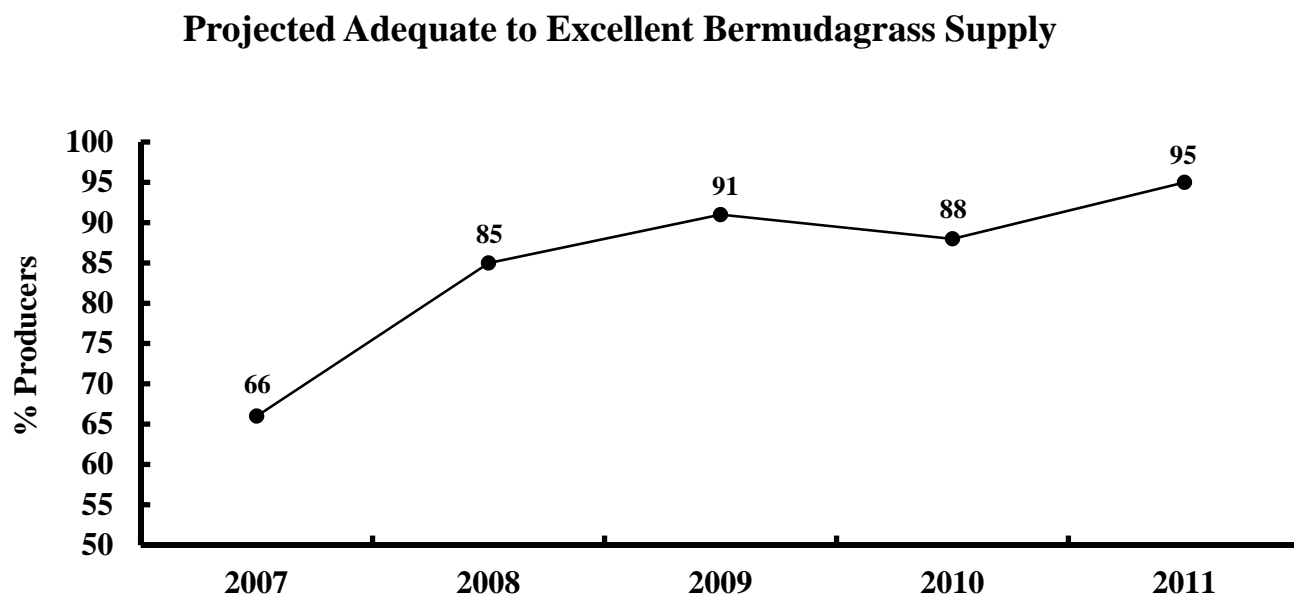
* Delivered price includes freight and pallets. In 2010, the delivered price included the Atlanta area or within 100 miles of the farm; in 2009, and prior, the delivered price was for the Atlanta area only.

Table 5. Ranking of industry segments for sale of turfgrass.

Industry segments	2011		2010	
	Rank	Average[*]	Rank	Average[*]
Landscape Contractors	1	43.0	1	42.0
Homeowners	2	16.0	2	15.0
Garden Centers	3	11.0	7	6.3
Golf Courses	4	9.8	4	8.8
Sports / Athletic Fields	5	7.3	3	11.0
Brokers	6	5.3	6	7.0
Existing Developers	7	4.5	4	8.8
Landscape Designers	8	2.5	8	2.0
Sod Farms	9	0.8	-	-

* Average percentage of total sales.

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



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

Figure 2. Historical perspective of sod prices in Georgia, 2007 to 2011.

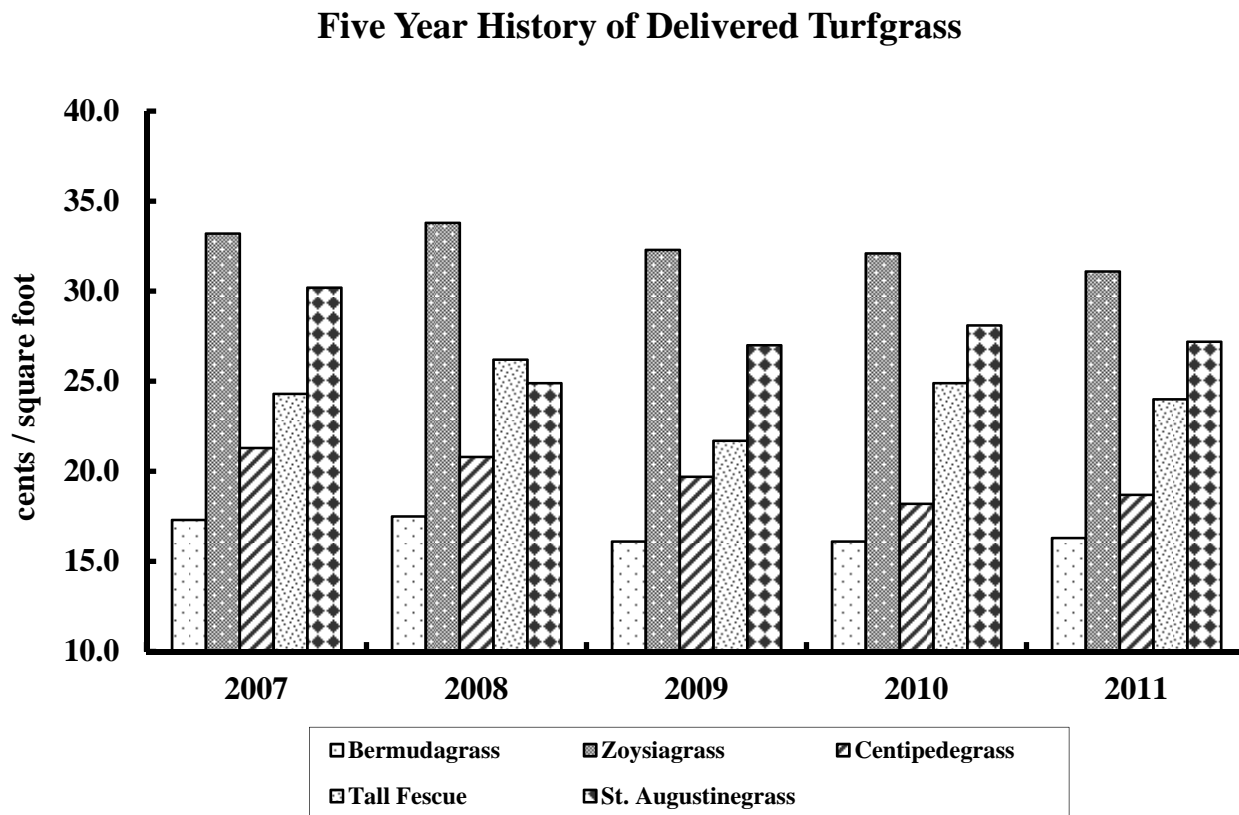
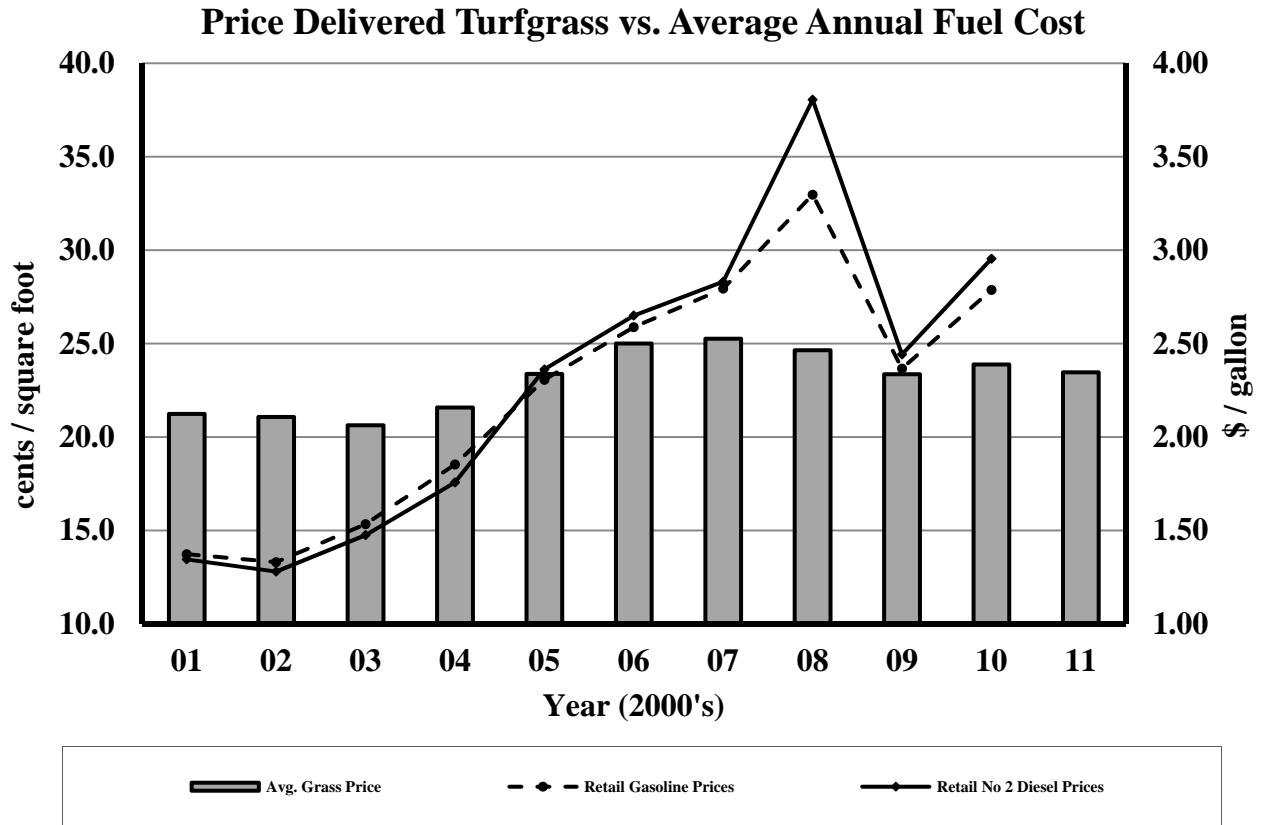


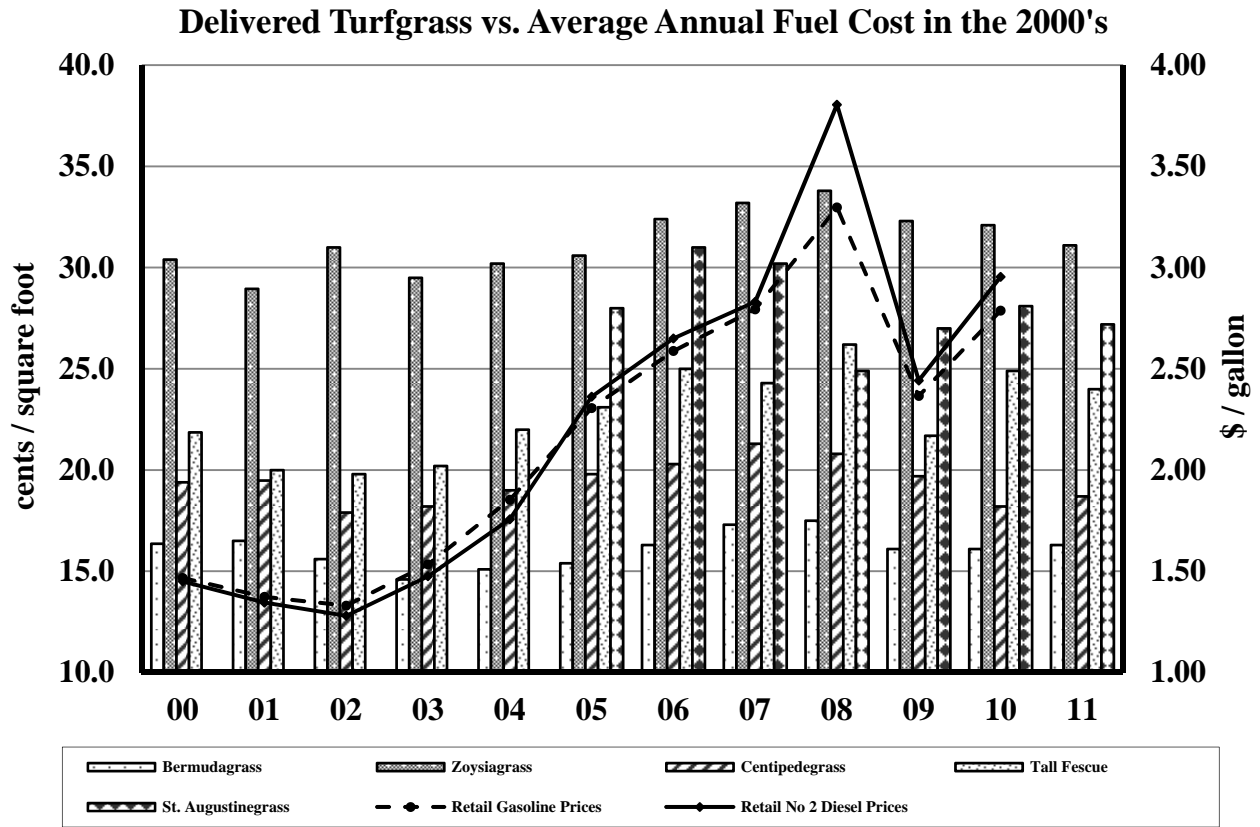
Figure 3. Ten year comparison of average sod price with fuel cost.



* Average grass price was calculated for the five turfgrass species commonly grown in Georgia.

** Average annual retail fuel cost for the Lower Atlantic region was found at www.eia.doe.gov.

Figure 4. Historical perspective of sod prices in Georgia, 2007 to 2011.



http://www.eia.doe.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMD_EPD2D_PTE_R1Z_DPG&f=A