

2013, Annual Georgia Sod Producers Inventory Survey

Clint Waltz and B. J. Johnson
The University of Georgia

In October, the Georgia Urban Ag. Council, formally Georgia Sod Producers Association, conducted their eighteenth consecutive survey of sod producers. The purpose of the survey was to determine the status of inventory levels and projected price changes for spring 2013. Forty-two producers participated by telephone and written / fax survey, representing farm sizes which were less than 300 acres (32 participants), 300 to 600 acres (5 participants), 601 to 900 acres (2 participants), and more than 900 acres (3 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 2013 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.

Inventory Levels

Bermudagrass is being grown by 90% of the surveyed producers. Inventory levels had stabilized through the early part of the decade then increased in the later years. Due to drought conditions in South Georgia during the 2011 growing season inventory declined for 2012. There appears to be a rebound in 2013 (Figure 1). Eighty-one percent of the producers rated their inventory as adequate to excellent this year. For 2013, 19% of all bermudagrass producers projected having less than adequate supplies, compared with 31% last year and 5% in 2011. Two of three growers with greater than 900 acres expect an adequate bermudagrass supply. Likewise, 81% of producers with 600 acres or less project adequate to excellent supply.

According to this year's survey, the number of producers growing zoysiagrass (52%) was consistent with 2012 (53%) and 2011 (50%). Of the producers responding, 82% estimate an adequate to excellent inventory, which reversed last year's downward estimate (Figure 2). For early spring 2013, 18% of the zoysiagrass producers project a shortage of grass.

Of the 42 producers surveyed 27 (64%) were growers of centipedegrass. Seventy-four percent of the growers had adequate to excellent inventory compared to 61% in 2012, and 83% in 2011. Two of three growers with greater than 900 acres expect a shortage in centipedegrass supply. Twenty-six percent of all centipedegrass growers anticipate a shortage during 2013.

St. Augustinegrass is being grown by 8 of the 42 producers surveyed. Unlike previous years where only the larger producers had inventories, this is the fifth year each of the lower two categories also had growers of St. Augustinegrass. Of the producers, 50% reported adequate supply, that means an equal amount project a shortage. The two growers with greater than 600 acres in turfgrass production have an adequate supply.

Consistent with previous years, tall fescue was grown by a similar percentage of producers (25% to 34%). Eighty percent of tall fescue producers reported excellent to adequate inventory, which continues a nine-year trend of sufficient tall fescue supply. The amount of tall fescue sod grown in Georgia meets demand.

Sod Prices

For 2013, the on-the-farm prices for three of five grass species were greater than 2012 (Table 1). Similarly, the delivered price for three of five species increased. Tall fescue and St. Augustinegrass are expected to be lower. Figure 3 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, did not change from the previous year (Table 1). The 2013

survey indicated prices varied from 13.8 cents to 25.0 cents, with an average price of 17.8 cents (Table 2). The average price in 2012 was 17.7 cents per square foot and ranged from 14.3 cents to 26.0 cents.

The 2013 average price for a delivered truckload of zoysiagrass increased slightly from 2012 levels. The average price of delivered zoysiagrass in 2013 was 35.3 cents and ranged from 21.0 to 48.5 cents. In 2012 zoysiagrass prices ranged from 22.5 to 43.0 cents and averaged 34.5 cents. It appears that shortages of zoysiagrass experienced in 2012 may still be influencing prices.

Relative to the previous year, centipedegrass prices rose narrowly for a third consecutive year (3.0%, 7.9% ,and 2.7% for 2013, 2012, and 2011 respectively). Prices in 2013 ranged from 15.0 cents to 25.0 cents and averaged 20.8 cents, compared to 2012 when the average delivered price was 20.2 cents and ranged from 15.2 to 25.0 cents. While centipedegrass increased in 2013 they are still more than -2% lower than 2007 prices (21.3 cents).

The 2013 delivered price of tall fescue fell (-6.0%), which reversed last year's 4.7% increase in price from the previous year. This year, prices ranged from 18.0 cents to 28.5 cents, with an average of 23.6 cents. The low-end price fell 5 cents while the upper boundary decreased a penny from 2012.

Reversing last year's increase, the price of delivered St. Augustinegrass fell substantially in 2013. This year's loss (13.2%) brings St. Augustinegrass back in-line with 2009 to 2011 prices. The average price of delivered St. Augustinegrass in 2013 was 29.5 cents and ranged from 5.0 to 38.0 cents. In 2012, St. Augustinegrass prices ranged from 30.0 to 38.0 cents and averaged 34.0 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, like this year, with a -13% decrease from the previous year, to years like 2012 where prices rose 25%.

Regarding grower price expectations, 61% of bermudagrass producers expect steady bermudagrass prices during the first five months of 2013. This is an increase from 2012 where 50% expected constant prices. This year, 36% forecast bermudagrass prices to increase while 1 of 36 growers anticipates a decrease. In spring 2012, 50% projected an increase. For zoysiagrass, 65% of producers anticipate steady prices during the first five months of 2013; 35% of producers forecast a increase. Most centipedegrass and tall fescue producers anticipate constant prices, 70% and 89% respectively. Eighty-eight percent of St. Augustinegrass producers expect prices to remain unchanged; 13% forecast an increase. Considering the “big 3” species (i.e. bermudagrass, centipedegrass, and zoysiagrass), the preponderance of growers anticipate steady or rising prices in 2013.

Certification

Same as 2012, 2013 had 24 producers representing 57% of the respondents with some certified grass on their farm (Table 3). Fifty-four 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. This survey indicates a six-year trend of increasing average prices for certified grass (Table 3). In 2013, the typical extra cost ranged from 1.0 to 10.0 cents per square foot and averaged 3.0 cents. The low end of the range is consistent with the past four years. The upper end, however, is a substantial jump from previous years and maybe the result of misunderstanding the question. The greatest premium prior to this year was 5.0 per square foot in 2011. While the data suggest that on a 500 square foot pallet, this translates to between \$5.00 and \$50.00. In reality the cost is most likely between \$5.00 and \$25.00 per pallet. The consumer should consider this a nominal cost to insure varietal purity of a perennial species.

Freight and Unloading Fees

Freight rates per mile shipped to Atlanta, or within 100 miles of the farm, increased for 2013 (Table 4). Costs ranged from \$1.00 to \$6.00 but averaged \$3.19; this is a 7.8% increase from the 2012 average (\$2.96). Freight costs as a part of price quotes for customers was reported by 79% of respondents, the same as 2011 (78%). Thirteen respondents (31%) reported charging an unloading fee in 2013 compared to 38% in 2012. The minimum unloading fee (\$50) increased in 2013 but most producers charge between \$60 and \$75. Nearly all producers (91%) will make additional drops on a load. The low-end charge was up to \$20 in 2013, compared to \$10 in 2012. The high-end charge remained constant with 2011 and 2012 at \$85. The average cost for additional drops in 2013 was \$50.00, a slight increase from 2012 (\$47.70).

Fuel Surcharge

Declining from 2011, 17% reported adding a fuel surcharge to a load in 2013. This is less than reported in 2008 (46%) when fuel costs were similar to 2011 levels (Figure 4). In 2012 the number of producers adding this charge was 25%. This year, the average surcharge was \$71.25 per load. Figure 4 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 sod prices are in relation to increased fuel prices (Figure 4). Since 2003 the average sod prices rose 23%, whereas diesel fuel costs rose 165% (\$1.48 to \$3.92 / gallon) between 2003 and 2012. 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 20.6 to 25.4 cents per square foot within a ten year period is sustainable.

Markets

The 42 producers that participated in this survey estimated that the highest amount of sod was sold to landscape contractors (47.5%), an sizable increase from last year (Table 5). The average percentage of sales to homeowners declined slightly in 2013 to 15.8%, the fifth consecutive year this group held the number 2 position. Sports retained the third position in this year's survey. In 2008, brokers were the second largest industry segment for sale of turfgrass. In 2013, this group accounted for 6.8% of sales, decreasing their rank to 6th.

Acreage in Production

In the last three 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 2012 due to the economy?" Last year 38% of the respondents answered that they removed some acreage on their farms. On this year's survey 24% responded that they had removed turfgrass acreage from production. The second question was "are additional reductions expected in 2013?" The average grower expected removing 17% of their acreage from sod production in 2010. In 2013, the average loss of acres in production is 25%. The anticipated reductions may range from 10% to 50%. Some growers (17 of 42) indicated they had added acreage since 2009, averaging 17% in 2013.

Summary

From this survey it appears that prices for the three species in greatest production (i.e. bermudagrass, centipedegrass, and zoysiagrass) will remain near last year's prices. Supply shortages experienced in 2012 will likely correct themselves in 2013 as grass matures and comes back on-line. It would stand to reason that as supply somewhat improves and demand either remains constant or increases, the price would marginally rise. Over the past five years the number of sod producers has declined, as have the total acres in turfgrass production. These interrelated factors are contributing to an overall decline in inventories and increased prices. It

will simply take time for inventory to recover and growers to become comfortable with the progress of an economic recovery to bring additional acreage into production. In the meantime, prices will likely remain high and potentially rise further. Additionally, with the U.S. Energy Information Administration predicting gasoline to remain around \$3.50 / gallon, additional fees associated with transportation and delivery are likely to remain high.

Table 1. Change in prices from spring 2012 to 2013.

Turfgrasses	On-the-farm			Delivered*		
	2012	2013	% Change	2012	2013	% Change
	----- Cents / ft ² -----			----- Cents / ft ² -----		
Bermudagrass	13.4	14.1	5.2	17.7	17.8	0.6
Zoysiagrass	28.1	29.1	3.6	34.5	35.3	2.3
Centipedegrass	15.8	18.8	19.0	20.2	20.8	3.0
Tall Fescue	20.3	19.4	-4.4	25.1	23.6	-6.0
St. Augustinegrass	28.4	26.3	-7.4	34.0	29.5	-13.2

* Delivered price includes freight and pallets. 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, 2013.

Turfgrasses	On-the-farm		Delivered*	
	Price (avg.)	Range	Price (avg.)	Range
	----- Cents / ft ² -----			
Bermudagrass	14.1	9.0 – 21.0	17.8	13.8 – 25.0
Zoysiagrass	29.1	21.0 – 45.0	35.3	21.0 – 48.5
Centipedegrass	18.8	14.0 – 25.0	20.8	15.0 – 25.0
Tall Fescue	19.4	14.0 – 28.0	23.6	18.0 – 28.5
St. Augustinegrass	26.3	15.0 – 32.0	29.5	15.0 – 38.0

* Delivered price includes freight and pallets. 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 -----	
2013	57	24	54	13	3.0	1.0 – 10.0
2012	60	24	58	14	1.8	1.0 – 4.5
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

* Total number of respondents 42, 40, 46, 44, and 52 for 2013, 2012, 2011, 2010, and 2009 respectively.

Table 4. Historical freight rate for sod deliveries.

Year	Range	Average	% Change
	----- \$ / mile -----		
2013	1.00 – 6.00	3.19	7.8
2012	0.50 – 5.38	2.96	13.9
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

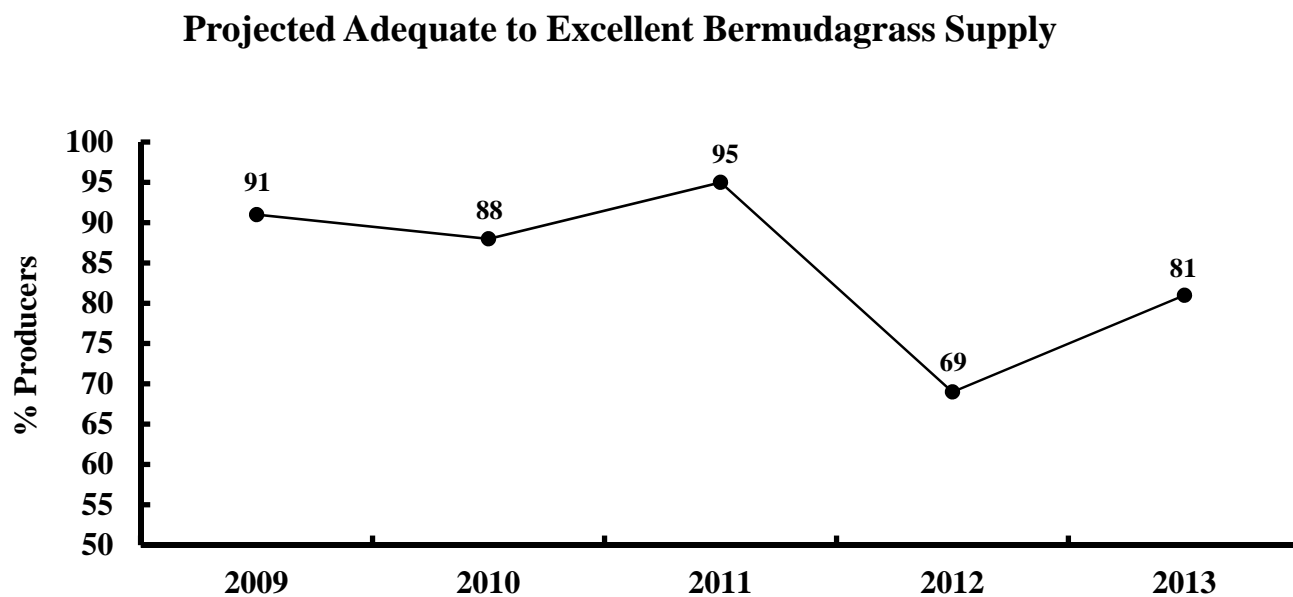
* Delivered price includes freight and pallets. Since 2010, the delivered price included the Atlanta area or within 100 miles of the farm; in 2009 the delivered price was for the Atlanta area only.

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

Industry segments	2013		2012	
	Rank	Average[*]	Rank	Average[*]
Landscape Contractors	1	47.5	1	34.5
Homeowners	2	15.8	2	18.5
Sports / Athletic Fields	3	9.8	3	10.5
Golf Courses	4	7.8	5	8.3
Garden Centers	5	7.3	5	8.3
Brokers	6	6.8	4	10.3
Existing Developers	7	4.0	7	4.0
Landscape Designers	8	1.5	8	3.3

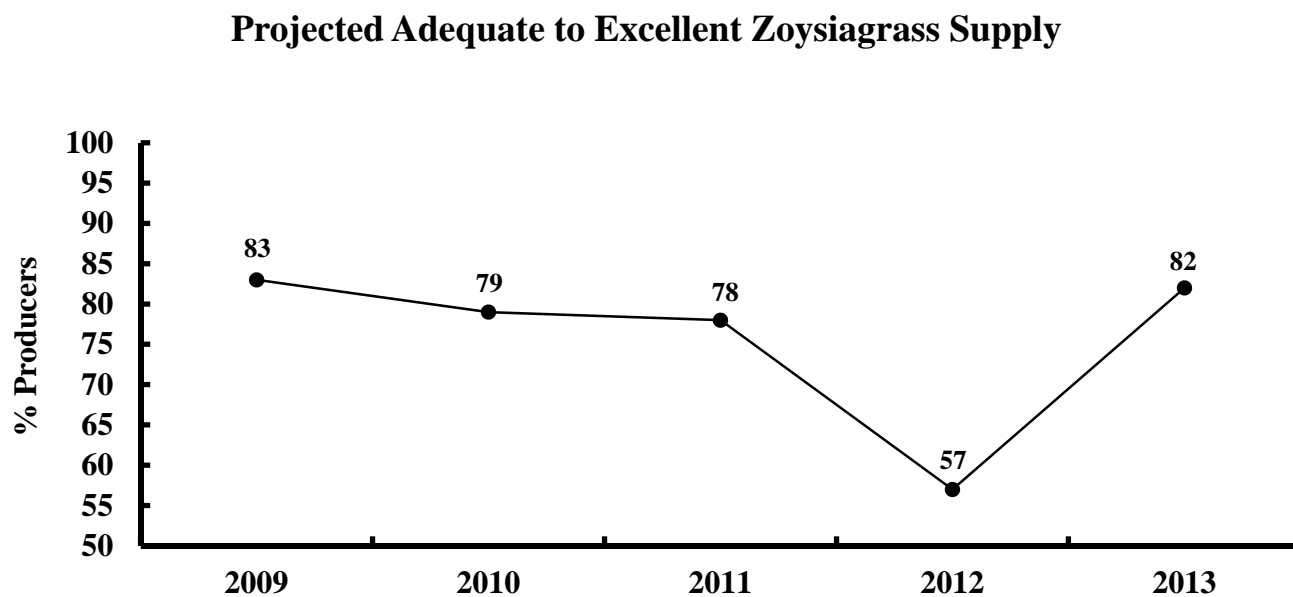
^{*} Average percentage of total sales.

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. Percentage of zoysiagrass producers projecting adequate to excellent supply for the past five years.



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

Figure 3. Historical perspective of sod prices in Georgia, 2009 to 2013.

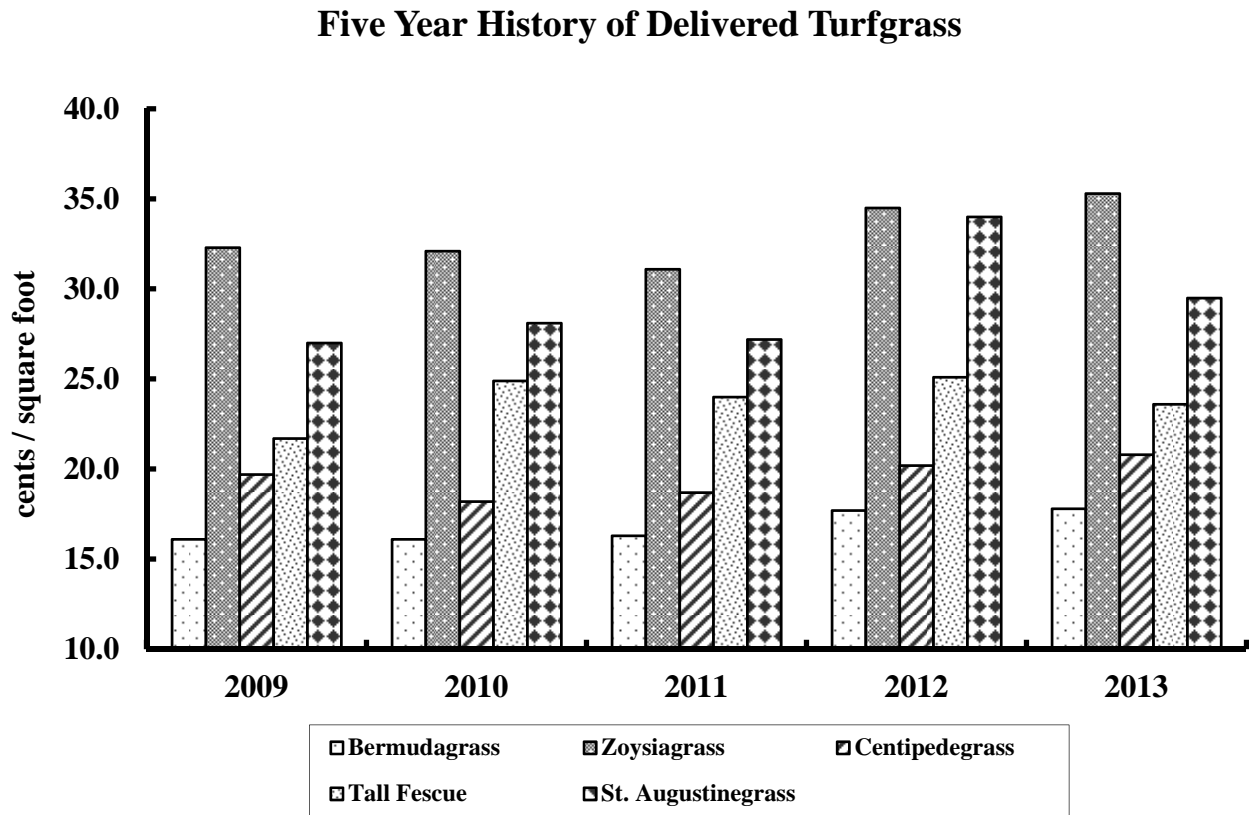
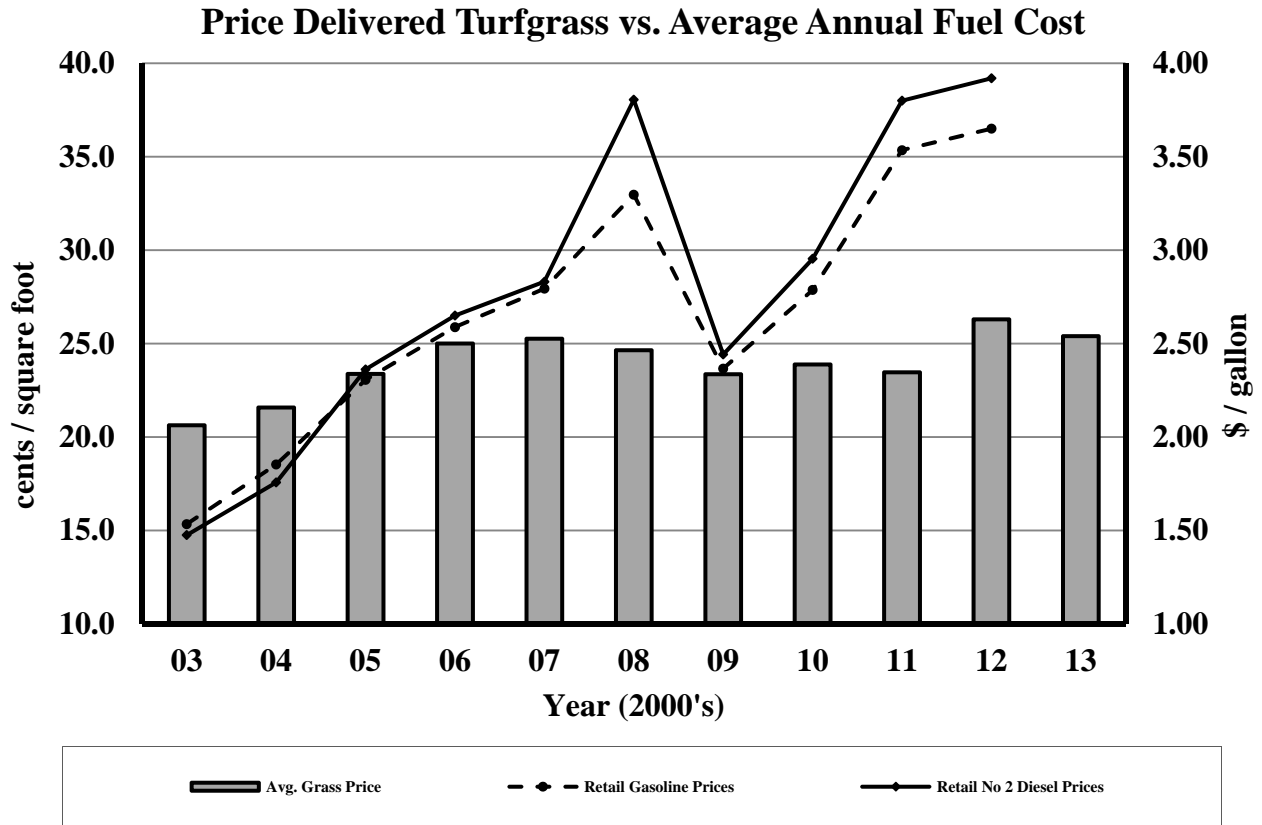


Figure 4. Ten year comparison of average sod price with fuel cost.



* 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.
 For 2012, the average retail fuel cost was calculated through November 26.