

2012, Annual Georgia Sod Producers Inventory Survey

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In January, 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 2012. Forty producers participated by telephone and written / fax survey, representing farm sizes which were less than 300 acres (29 participants), 300 to 600 acres (5 participants), 601 to 900 acres (3 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 2012 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 2008 but are expected to substantially decline in 2012 (Figure 1). Sixty-nine percent of the producers rated their inventory as adequate to excellent this year. For 2012, 31% of all bermudagrass producers projected having less than adequate supplies, compared with 5% last year and 12% in 2010. Two of three growers with greater than 900 acres expect a shortage in bermudagrass supply. Likewise, 3 of the 5 producers surveyed with 300 to 600 acres project a deficient supply.

According to this year's survey, the number of producers growing zoysiagrass (53%) was

consistent with 2011 (50%). Of the producers responding, 57% estimate an adequate to excellent inventory which reversed an upward trend in availability that started in 2008 (Figure 2). For early spring 2012, 43% of the zoysiagrass producers project a shortage of grass. However, most of the shortage occurred from producers between 300 and 600 acres and all of the producers with greater than 900 acres.

Of the 40 producers surveyed 23 (58%) were growers of centipedegrass. sixty-one percent of the growers had adequate to excellent inventory compared to 83% in 2011, and 100% in 2010. Thirty-nine percent of the centipedegrass growers anticipate a shortage during 2012; growers with less than 600 acres comprise the majority (30%) of these producers. Of the larger growers, 60% anticipate ample supply of centipedegrass.

St. Augustinegrass is being grown by 7 of the 40 producers surveyed. Unlike previous years where only the larger producers had inventories, this is the fourth year each of the lower two categories also had growers of St. Augustinegrass. Of the producers, 86% reported adequate supply. The three 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%). All tall fescue producers reported excellent to adequate inventory, which continues an eight-year trend of sufficient tall fescue supply. This strengthens the assessment that the amount of tall fescue sod grown in Georgia meets demand.

Sod Prices

For 2012, the on-the-farm prices for all five grass species were greater than 2011 (Table 1). Similarly, the delivered price for all species increased. In fall 2011, when a subset of producers were surveyed regarding prices there were indications that prices for all species had increased from earlier in the year. More comprehensive sampling in this survey confirms the

results measured in late 2011. 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, increased from the previous year (Table 1). This year's average delivery price was similar to 2008 prices (Figure 3). The 2012 survey indicated prices varied from 14.3 cents to 26.0 cents, with an average price of 17.7 cents (Table 2). The average price in 2011 was 16.3 cents per square foot and ranged from 12.0 cents to 26.0 cents.

The 2012 average price for a delivered truckload of zoysiagrass increased appreciably from 2011 levels. The average price of delivered zoysiagrass in 2012 was 34.5 cents and ranged from 22.5 to 43.0 cents. In 2011 zoysiagrass prices ranged from 18.0 to 40.0 cents and averaged 31.1 cents. Previous to 2008, zoysiagrass producers predicted shortages which likely lead to price increases. From this year's survey it appears that decreased production levels of zoysiagrass are once again leading to elevated prices.

Relative to the previous year, centipedegrass prices rose for a second consecutive year (7.9% and 2.7% for 2012 and 2011 respectively). Prices in 2012 ranged from 15.2 cents to 25.0 cents and averaged 20.2 cents, compared to 2011 when the average delivered price was 18.7 cents and ranged from 14.0 to 24.0 cents. While centipedegrass rose in 2012 they are still -5% lower than 2007 prices (21.3 cents).

The 2012 delivered price of tall fescue increased (4.7%), which reversed last year's -3.6% decrease in price from the previous year. This year, prices ranged from 23.0 cents to 29.5 cents, with an average of 25.1 cents. The low-end price rose 3 cents while the upper boundary decreased a half-a-cent from 2011.

Reversing last year's decrease, the price of delivered St. Augustinegrass rose substantially in 2012. This year's gain (25%) brings St. Augustinegrass its greatest price in the past five years.

The average price of delivered St. Augustinegrass in 2012 was 34.0 cents and ranged from 30.0 to 38.0 cents. In 2011, St. Augustinegrass prices ranged from 22.0 to 32.0 cents and averaged 27.2 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 25% increase from the previous year, to years like 2008 where prices fell - 17.5%.

Regarding grower price expectations, 50% of bermudagrass producers foresee a bermudagrass price increase during the first five months of 2012. In spring 2011, 20% anticipated an increase. This year, 50% expect bermudagrass prices to remain unchanged while none expect a decrease. This is a decrease from 2011 where 76% expected constant prices. For zoysiagrass, 57% of producers anticipate rising prices during the first five months of 2012, while no producers forecast a decrease. Most centipedegrass and tall fescue producers anticipate constant prices, 61% and 73% respectively. Fifty percent of St. Augustinegrass producers expect prices to remain unchanged or increase. Considering the “big 3” species (i.e. bermudagrass, centipedegrass, and zoysiagrass), no growers anticipate declining prices in 2012.

Certification

Down from 2011, 2012 had 24 producers representing 60% of the respondents with some certified grass on their farm (Table 3). Fifty-eight 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 five-year trend of increasing average prices for certified grass (Table 3). In 2012, the typical extra cost ranged from 1.0 to 4.5 cents per square foot and averaged 1.8 cents. On a 500 ft² pallet, this translates to between \$5.00 and \$22.50. 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 2012 (Table 4). Costs ranged from \$0.50 to \$5.38 but averaged \$2.96; this is a 13.9% increase from the 2011 average (\$2.60). Freight costs as a part of price quotes for customers was reported by 78% of respondents, a decrease from 2011 (83%). Fifteen respondents (38%) reported charging an unloading fee in 2012 compared to 37% in 2011. The minimum unloading fee (\$20) declined in 2012 but most producers charge between \$50 and \$75. Nearly all producers (95%) will make additional drops on a load. The low-end charge was down to \$10 in 2012. The high-end charge remained constant with 2011 at \$85. The average cost for additional drops in 2012 was \$47.70, an increase from 2011 (\$44.38).

Fuel Surcharge

Reversing a three year decline, 25% reported adding a fuel surcharge to a load in 2012. This is less than reported in 2008 (46%) when fuel costs were similar to 2011 levels (Figure 4). In 2011 the number of producers adding this charge was 9%. This year, the average surcharge was \$65.00 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 increased sod prices are in relation to increased fuel prices (Figure 4). Since 2002 the average sod prices rose 25%, whereas diesel fuel costs rose 197% (\$1.28 to \$3.80 / gallon) between 2002 and 2011, spiking at \$3.81 (198%) 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 21.1 to 26.3 cents per square foot within a ten year period is sustainable.

Markets

The 40 producers that participated in this survey estimated that the highest amount of sod was sold to landscape contractors (34.5%), a decrease from last year (Table 5). The average percentage of sales to homeowners rose slightly in 2012 to 18.5%, the fourth consecutive year this group held the number 2 position. Sports fields took the third position in this year's survey. In 2008, brokers were the second largest industry segment for sale of turfgrass. In 2012, this group accounted for 10.3% of sales, improving their rank to 4th, the greatest gain from a year ago.

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 2011 due to the economy?" Last year 48% of the respondents answered that they removed some acreage on their farms. On this year's survey 38% responded that they had removed turfgrass acreage from production. The second question was "are additional reductions expected in 2012?" The average grower expected removing 17% of their acreage from sod production in 2010. In 2011, the average increased to 36% but, has decreased to 13% for 2012. The anticipated reductions may range from 10% to 90%. Some growers (9 of 40) indicated they had added acreage since 2008, averaging 19% in 2012.

Summary

From this survey it is evident that turfgrass prices are rising and the two species in greatest production (i.e. bermudagrass and zoysiagrass) are in low supply. Contributing factors that may explain these data are basic economics, drought, and industry constriction. It would stand to reason that as supply diminishes and demand either remains constant or increases, the price would rise. Environmental conditions experienced across Georgia during 2011 were not ideally conducive for sod production, particularly in the State's southern production region. Although

sod fields are irrigated, regrowth is slower when rainfall is limited. Furthermore, greater reliance on irrigation increases the input costs of production which also lead to increased prices. Lastly, over the past five years the number of sod producers has declined as have the total acres in turfgrass production. These interrelated factors are likely contributing to lower 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 2011 to 2012.

Turfgrasses	On-the-farm			Delivered*		
	2011	2012	% Change	2011	2012	% Change
	----- Cents / ft ² -----			----- Cents / ft ² -----		
Bermudagrass	12.0	13.4	11.3	16.3	17.7	8.7
Zoysiagrass	26.0	28.1	8.2	31.1	34.5	11.0
Centipedegrass	14.8	15.8	7.1	18.7	20.2	7.9
Tall Fescue	19.2	20.3	5.8	24.0	25.1	4.7
St. Augustinegrass	22.5	28.4	26.3	27.2	34.0	25.0

* 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, 2012.

Turfgrasses	On-the-farm		Delivered*	
	Price (avg.)	Range	Price (avg.)	Range
	----- Cents / ft ² -----			
Bermudagrass	13.4	9.0 – 21.0	17.7	14.3 – 26.0
Zoysiagrass	28.1	20.0 – 40.0	34.5	22.5 – 43.0
Centipedegrass	15.8	13.0 – 18.5	20.2	15.2 – 25.0
Tall Fescue	20.3	18.0 – 23.0	25.1	23.0 – 29.5
St. Augustinegrass	28.4	23.0 – 32.0	34.0	30.0 – 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 -----	
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
2008	81	26	65	17	1.1	1.0 – 2.0

* Total number of respondents 40, 46, 44, 52, and 32 for 2012, 2011, 2010, 2009, and, 2008 respectively.

Table 4. Historical freight rate for sod deliveries.

Year	Range	Average	% Change
	----- \$ / mile -----		
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
2008	2.45 – 6.00	3.06	

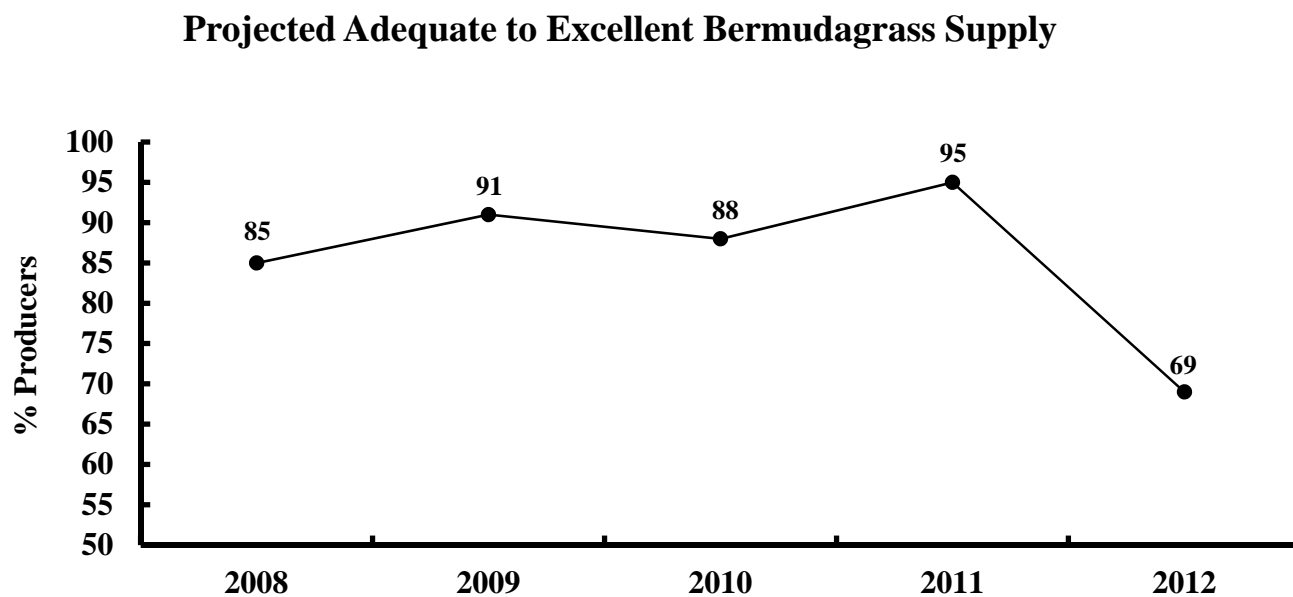
* Delivered price includes freight and pallets. Since 2010, the delivered price included the Atlanta area or within 100 miles of the farm; in 2009, and prior, the delivered price was for the Atlanta area only.

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

Industry segments	2012		2011	
	Rank	Average[*]	Rank	Average[*]
Landscape Contractors	1	34.5	1	43.0
Homeowners	2	18.5	2	16.0
Sports / Athletic Fields	3	10.5	5	7.3
Brokers	4	10.3	6	5.3
Garden Centers	5	8.3	3	11.0
Golf Courses	5	8.3	4	9.8
Existing Developers	7	4.0	7	4.5
Landscape Designers	8	3.3	8	2.5
Sod Farms	-	-	9	0.8

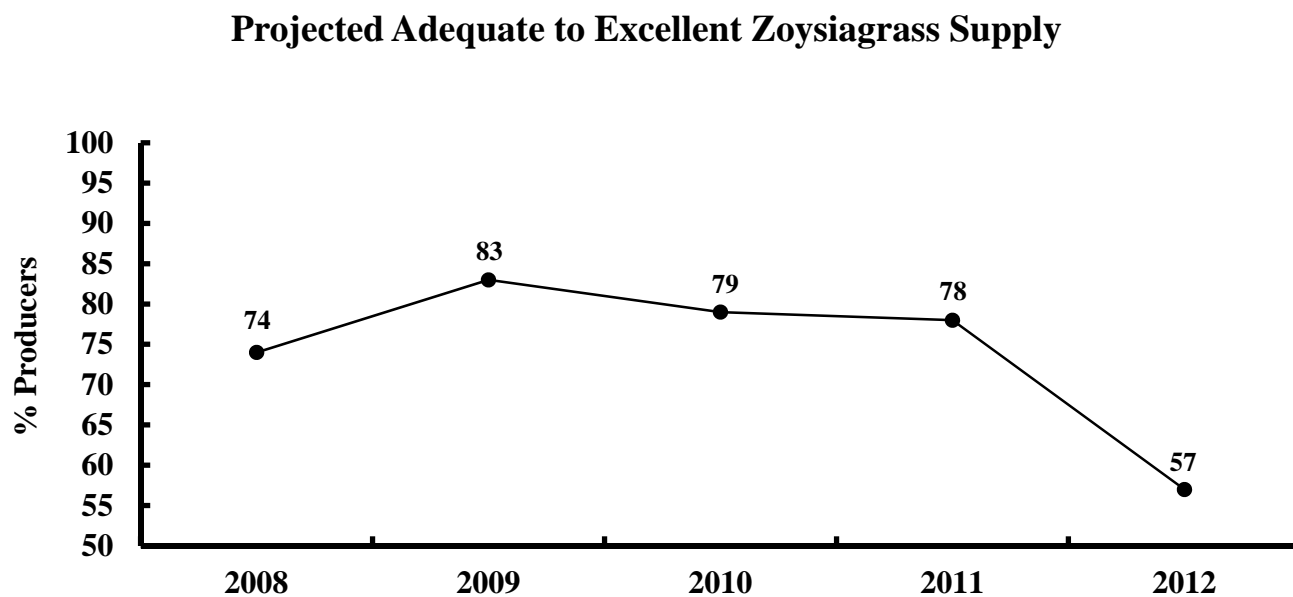
^{*} Average percentage of total sales.

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. 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, 2008 to 2012.

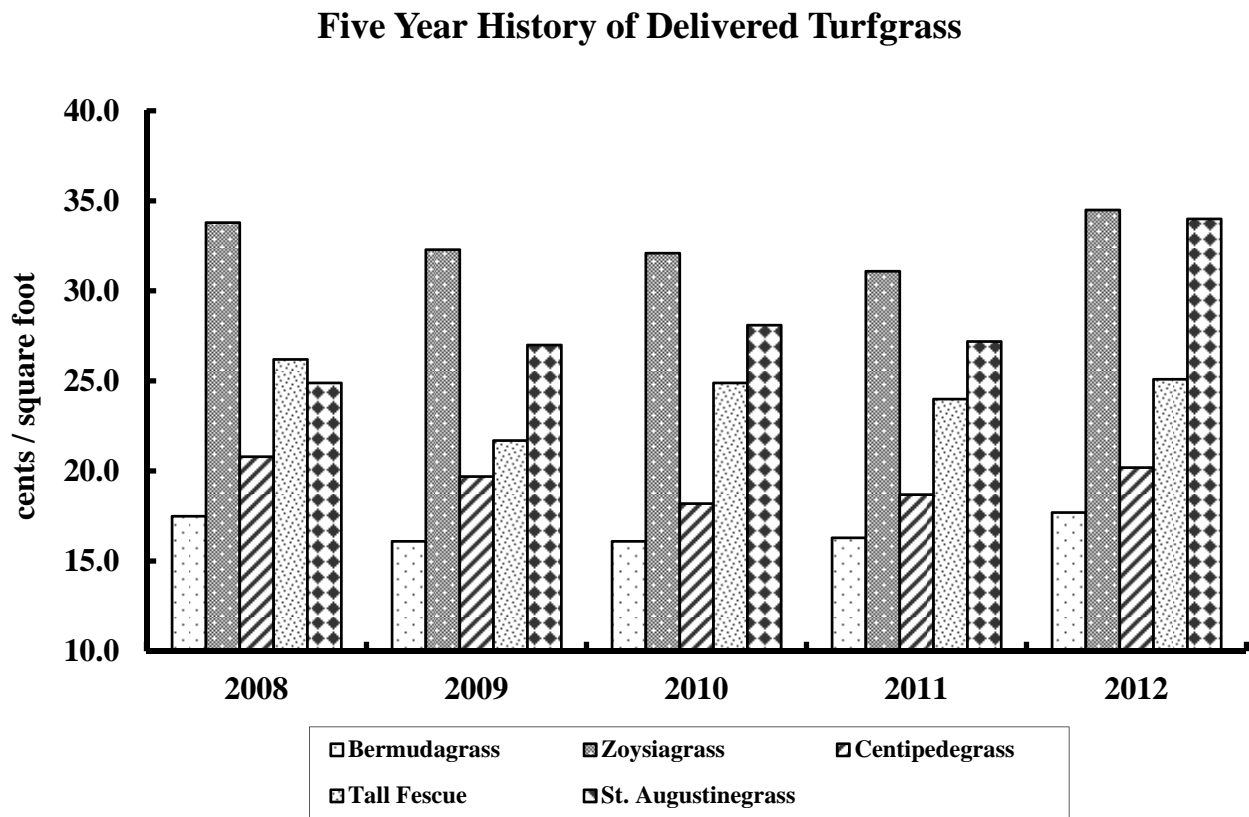
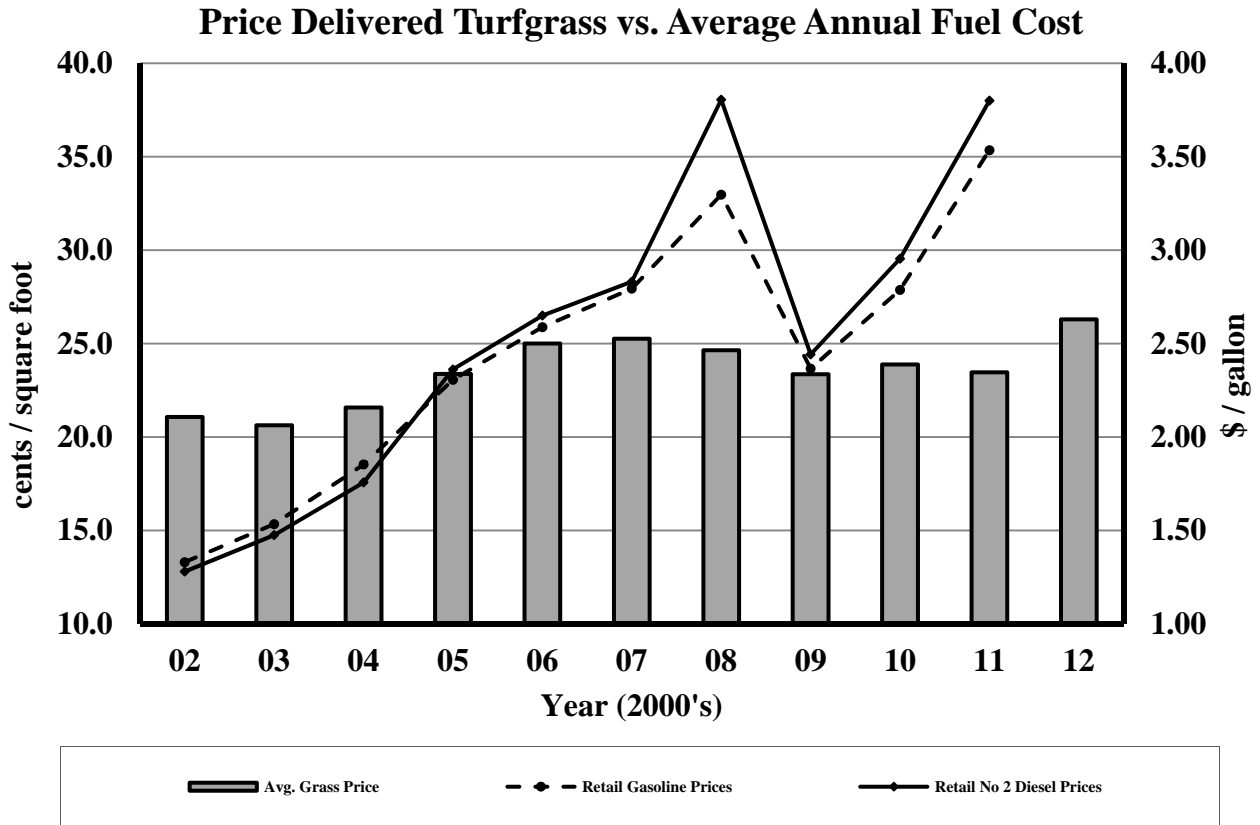


Figure 4. Ten year comparison of average sod price with fuel cost.



* 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.