

2014, Annual Georgia Sod Producers Inventory Survey

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In October, the Georgia Urban Ag. Council, formally Georgia Sod Producers Association, conducted their twentieth consecutive survey of sod producers. The purpose of the survey was to determine the status of inventory levels and projected price changes for spring 2014. Thirty-five producers participated by telephone survey, representing farm sizes which were less than 300 acres (27 participants), 300 to 600 acres (2 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 2014 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 83% 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. Although not drought, it appears environmental conditions experienced during the 2013 growing season will negatively impact inventory in 2014 (Figure 1). Fifty-two percent of the producers rated their inventory as adequate to excellent this year, the lowest ever measured. For 2014, 48% of all bermudagrass producers projected having less than adequate supplies, compared with 19% last year and 31% in 2012. No growers with greater than 900 acres expect an adequate

bermudagrass supply, while only 60% of producers with 600 acres or less project having sufficient inventories. Regardless of grower category, bermudagrass supply is low.

According to this year's survey, the number of producers growing zoysiagrass (60%) was an increase over the last three years. Of the producers responding, 52% estimate an adequate to excellent inventory, which reversed last year's upward estimate (Figure 2). Only 2007 had fewer growers anticipating a suitable supply. For early spring 2014, 48% of the zoysiagrass producers project a shortage of grass.

Of the 35 producers surveyed 20 (57%) were growers of centipedegrass. Sixty-five percent of the growers had adequate to excellent inventory compared to 74% in 2013, and 61% in 2012. Two of three growers with greater than 900 acres expect a shortage in centipedegrass supply. Thirty-five percent of all centipedegrass growers anticipate a shortage during 2014.

St. Augustinegrass is being grown by 5 of the 35 producers surveyed. Sixty percent reported adequate supply, including the two growers with greater than 600 acres in total turfgrass production.

Consistent with previous years, tall fescue was grown by a similar percentage of producers (20% to 34%). Eighty-six percent of tall fescue producers reported excellent to adequate inventory, which continues a ten-year trend of sufficient tall fescue supply. The amount of tall fescue sod grown in Georgia meets demand.

Sod Prices

For 2014, the on-the-farm prices for four of five grass species were greater than 2013, while the delivered price for all species increased. Bermudagrass, centipedegrass, and St. Augustinegrass are expected to increase by more than 13%. Figure 3 provides a five-year perspective of sod prices, bermudagrass and centipedegrass are at historic levels.

The average price per square foot for a truckload of bermudagrass delivered to the Atlanta

area, or within 100 miles of the farm, is expected to rise 14% (Table 1). The 2014 survey indicated prices varied from 14.0 cents to 32.0 cents, with an average price of 20.3 cents (Table 2). The average price in 2013 was 17.8 cents per square foot and ranged from 13.8 cents to 25.0 cents.

The 2014 average price for a delivered truckload of zoysiagrass increased slightly from 2013 levels. The average price of delivered zoysiagrass in 2014 was 35.8 cents and ranged from 24.0 to 48.0 cents. In 2013 zoysiagrass prices ranged from 21.0 to 48.5 cents and averaged 35.3 cents. Considering expected price increases for 2014 and a consumer demand, as spring and summer 2014 progress zoysiagrass prices are likely to exceed these surveyed prices.

Relative to the previous year, centipedegrass prices rose markedly. Prices in 2014 ranged from 14.0 cents to 32.0 cents and averaged 23.5 cents, compared to 2013 when the average delivered price was 20.8 cents and ranged from 15.0 to 25.0 cents. Interestingly, it has taken seven years for centipedegrass to match or exceed 2007 prices (21.3 cents).

The 2014 delivered price of tall fescue increased (1.7%), which reversed last year's -6.0% decrease 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. Both the low- and high-end price was greater than 2013.

Reversing last year's decrease, the price of delivered St. Augustinegrass increased substantially in 2014. This year's gain (17.3%) brings St. Augustinegrass back in-line with 2006 and 2007 prices. The average price of delivered St. Augustinegrass in 2014 was 34.6 cents and ranged from 24.0 to 40.0 cents. In 2013, St. Augustinegrass prices ranged from 15.0 to 38.0 cents and averaged 29.5 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 last year, with a 13% decrease from the previous year, to years like 2014

where prices rose 17%.

Regarding grower price expectations, 28% of bermudagrass producers expect steady prices during the first five months of 2014. This is a decrease from 2013 where 61% expected constant prices. This year, 72% forecast bermudagrass prices to increase; regardless of category no grower anticipates a decrease. For zoysiagrass, 43% of producers anticipate steady prices during the first five months of 2014; 57% of producers forecast an increase. For centipedegrass, 50% of producers expect prices to remain constant in 2014, one grower forecast prices to fall. Tall fescue producers anticipate constant prices. Sixty percent of St. Augustinegrass producers expect prices to remain unchanged; 40% forecast an increase. Considering the “big 3” species (i.e. bermudagrass, centipedegrass, and zoysiagrass), the preponderance of growers anticipate rising prices in 2014.

Certification

2014 had 19 producers representing 54% of the respondents with some certified grass on their farm (Table 3). Forty-seven 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 seven-year trend of increasing average prices for certified grass (Table 3). In 2014, the typical extra cost ranged from 2.0 to 3.0 cents per square foot and averaged 2.0 cents. This translates to between \$10.00 and \$15.00 on a 500 square foot pallet. Disregarding 2013 which had an anomaly in value of certified grass, for 2014 the low end of the range is up relative to the past four years. The upper end however fell back to 2010 levels. With the average rising but the upper end price falling indicates more certified producers are increasing the value of their grass. 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, are unchanged from 2013 (Table 4). For 2014, costs ranged from \$1.00 to \$5.50 and averaged \$3.20; this is a 0.3% increase from the 2013 average (\$3.19). Freight costs as a part of price quotes for customers was reported by 88% of respondents. Sixteen respondents (47%) reported charging an unloading fee in 2014 compared to 31% in 2013. The minimum unloading fee (\$35) decreased in 2014 but most producers charge between \$75 and \$100. Nearly all producers (88%) will make additional drops on a load. The low-end charge was up to \$35 in 2014, compared to \$20 in 2013. The high-end charge increased to \$100. The average cost for additional drops in 2014 was \$58, a slight increase from 2013 (\$50).

Fuel Surcharge

Declining from 2013, 12% reported adding a fuel surcharge to a load in 2014. This is less than reported in 2008 (46%) when fuel costs were lower than 2014 levels (Figure 4). In 2013 the number of producers adding this charge was 17%. This year, the average surcharge was \$60 per load, down 16% from last year. Figure 4 compares the average sod price for all species grown with the average annual retail price for gasoline and diesel fuel. Historically the greatest fuel surcharge corresponded with the highest fuel rates but 2014 appears to be an exception.

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 2004 the average sod prices rose 27%, whereas diesel fuel costs rose 120% (\$1.76 to \$3.88 / gallon) between 2004 and 2013. Fuel being only one input for sod production (e.g. labor, fertilizer, pesticides, etc.), it is difficult to see how the average increase in price from 21.6 to 27.6 cents per square foot within a ten year period is keeping track with rising costs.

Markets

The 35 producers that participated in this survey estimated that the highest amount of sod

was sold to landscape contractors (Table 5). The average percentage of sales to homeowners declined slightly in 2014 to 14%, the sixth 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 2014, this group accounted for 7.8% of sales, up from 2013.

Acreage in Production

In the last four 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 2013?" Last year 24% of the respondents answered that they removed some acreage on their farms. On this year's survey 17% responded that they had removed turfgrass acreage from production. The second question was "are additional reductions expected in 2014?" In 2014, no grower expects to remove acres from turfgrass production. To the contrary, some growers (18 of 35) indicated they plan to add acres in 2014. A potential average of 26% more acres could come into production. However, this addition would not affect the market until 2015 or 2016.

Summary

From this survey it appears that prices for the three species in greatest production (i.e. bermudagrass, centipedegrass, and zoysiagrass) are increasing substantially with bermudagrass and centipedegrass at historic levels. Due to unfavorable environmental conditions for regrowth this past summer and strong fall sales (personal communication from several growers) inventory for all warm-season species is expected to be lower than commonly experienced for the first five months of the year.

Observations and trends over the past thirteen years are that growers with the greatest volume (i.e. >600 acres) of grass tend to have the greatest impact on inventory and are a

barometer as to where the market is heading on prices. There have been years where the forecast between smaller and larger growers was inconsistent, but that was not the case for 2014. Both groups were equally affected by the lack of sunlight during the 2013 growing season and were unable to regrow enough grass to meet expected demands. Over the past six 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 although growers are looking to put acres back into turfgrass production. In the meantime, prices will likely remain high and potentially rise further.

If projects are planned for 2014 where sod will be needed, it would be prudent to get price quotes regularly. Not all producers will “book” or presale grass at a locked price, but if they will, contacting them early may help ensure availability and the best price.

Table 1. Change in prices from spring 2013 to 2014.

Turfgrasses	On-the-farm			Delivered*		
	2013	2014	% Change	2013	2014	% Change
	----- Cents / ft ² -----			----- Cents / ft ² -----		
Bermudagrass	14.1	16.0	13.5	17.8	20.3	14.0
Zoysiagrass	29.1	30.6	5.2	35.3	35.8	1.4
Centipedegrass	18.8	17.7	-5.9	20.8	23.5	13.0
Tall Fescue	19.4	22.8	17.5	23.6	24.0	1.7
St. Augustinegrass	26.3	30.2	14.8	29.5	34.6	17.3

* 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, 2014.

Turfgrasses	On-the-farm		Delivered*	
	Price (avg.)	Range	Price (avg.)	Range
	----- Cents / ft ² -----			
Bermudagrass	16.0	10.0 – 27.0	20.3	14.0 – 32.0
Zoysiagrass	30.6	21.0 – 45.0	35.8	24.0 – 48.0
Centipedegrass	17.7	11.0 – 24.0	23.5	14.0 – 32.0
Tall Fescue	22.8	22.0 – 24.0	24.0	20.0 – 30.0
St. Augustinegrass	30.2	24.0 – 36.0	34.6	24.0 – 40.0

* 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 -----	
2014	54	19	47	9	2.0	2.0 – 3.0
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

* Total number of respondents 35, 42, 40, 46, and 44 for 2014, 2013, 2012, 2011, and 2010 respectively.

Table 4. Historical freight rate for sod deliveries.

Year	Range	Average	% Change
	----- \$ / mile -----		
2014	1.00 – 5.50	3.20	0.3
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

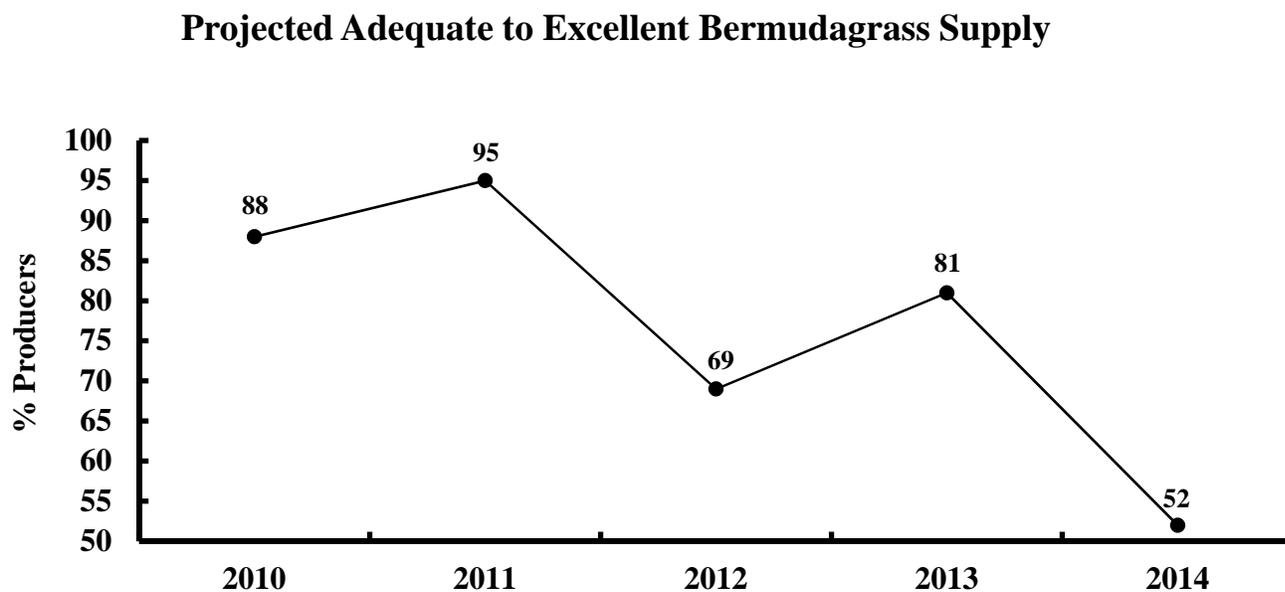
* Delivered price includes freight and pallets. The delivered price included the Atlanta area or within 100 miles of the farm.

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

Industry segments	2014		2013	
	Rank	Average[*]	Rank	Average[*]
Landscape Contractors	1	39.0	1	47.5
Homeowners	2	14.0	2	15.8
Sports / Athletic Fields	3	9.5	3	9.8
Golf Courses	4	7.8	4	7.8
Brokers	4	7.8	6	6.8
Garden Centers	6	4.8	5	7.3
Existing Developers	7	2.8	7	4.0
Landscape Designers	8	1.8	8	1.5

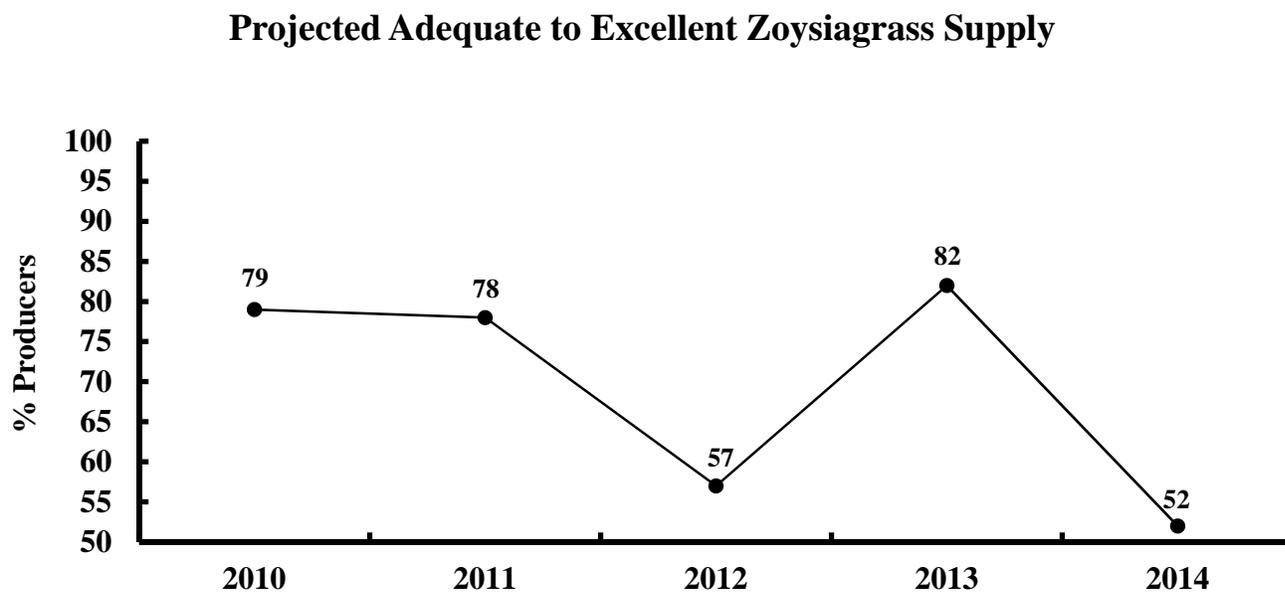
^{*} Average percentage of total sales.

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, 2010 to 2014.

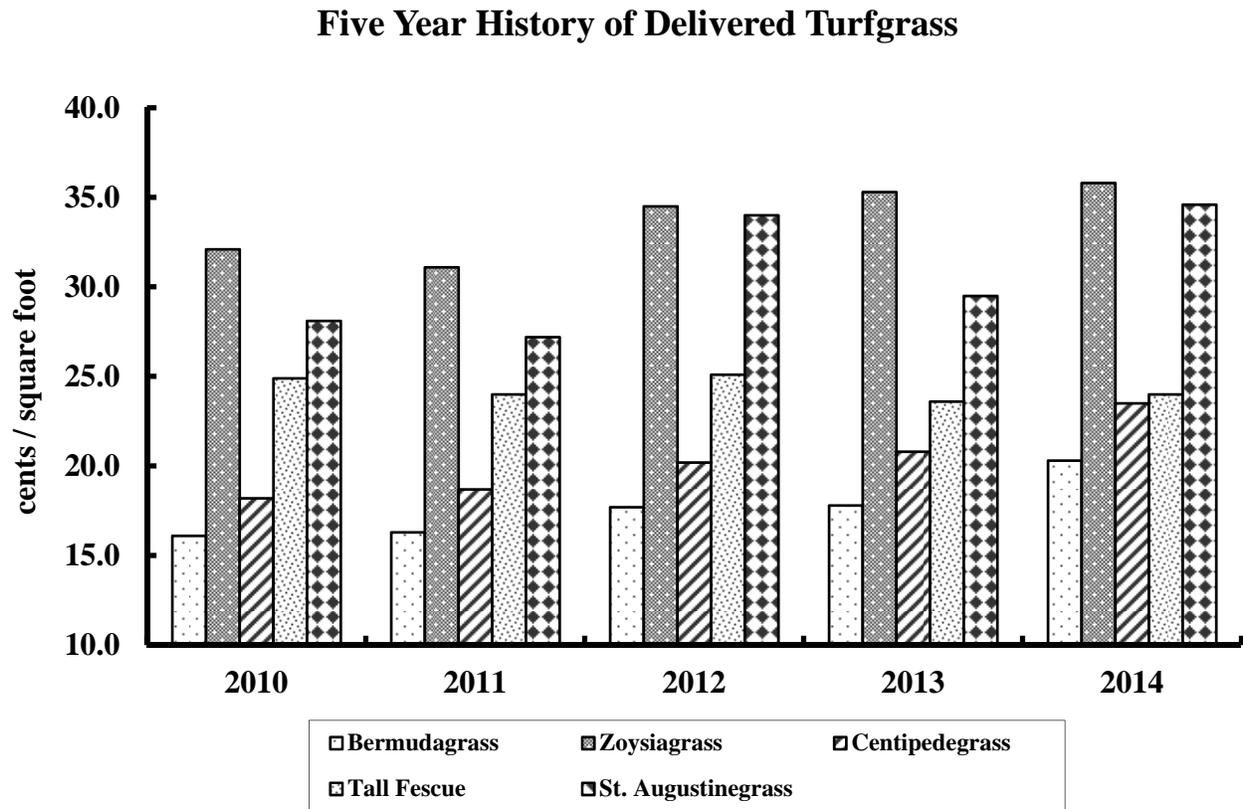
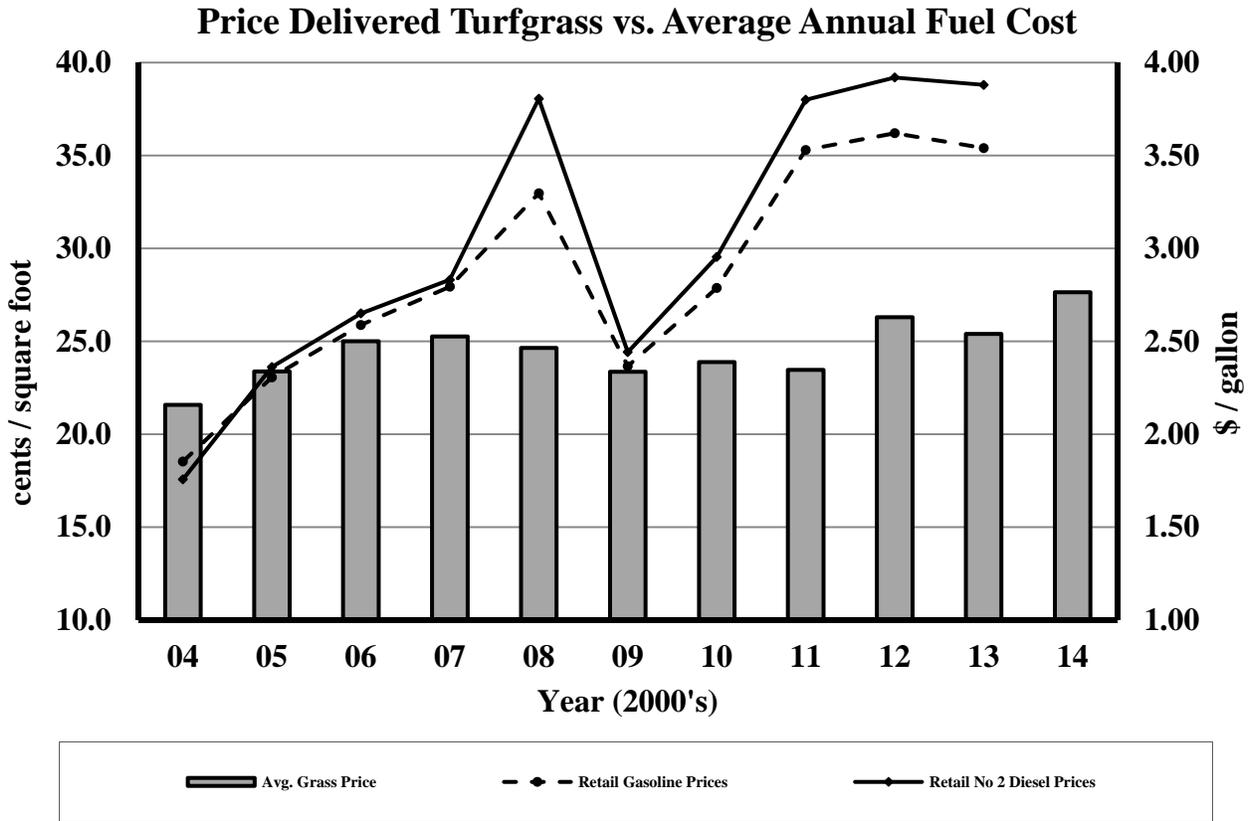


Figure 4. Ten year comparison of average sod price with fuel cost.



* 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 2013, the average retail fuel cost was calculated through December 2.

Bullet Points from the 2014 Sod Producers Inventory Survey

1. Bermudagrass and zoysiagrass supply is low, regardless of grower category.
2. The delivered price for bermudagrass, centipedegrass, and St. Augustinegrass are expected to increase by more than 13%.
3. Bermudagrass and centipedegrass prices are at historic levels.
4. Considering the “big 3” species (i.e. bermudagrass, centipedegrass, and zoysiagrass), the preponderance of growers anticipate rising prices in 2014.
5. 2014 continues a seven year trend of increasing average prices for certified grass.
6. Freight rates per mile shipped to Atlanta, or within 100 miles of the farm, are unchanged from 2013.
7. Fewer growers reported adding a fuel surcharge in 2014.
8. No grower expects to remove acres from turfgrass production.
9. More turfgrass acreage could come into production in 2014.
10. The primary markets for Georgia sod are landscape contractors and homeowners.
11. Get price quotes regularly.
12. If possible “book” or lock prices to ensure availability and price.