2016, Annual Georgia Sod Producers Inventory Survey

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In November, the Georgia Urban Ag. Council conducted their twenty-second consecutive survey of sod producers. The purpose of the survey was to determine the status of inventory levels and projected price changes for spring 2016. Seventeen producers participated by online and telephone survey, representing farm sizes which were less than 300 acres (8 participants), 300 to 600 acres (3 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 2016 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 100% of the surveyed producers. Just four years ago inventory levels were relatively high, but multiple factors (e.g. drought, limited light, prolonged spring, loss of acreage, etc.) contributed to a shortage of inventory. Fifty-nine percent of the producers rated their inventory as adequate to excellent this year, reversing a two-year decline (Figure 1). For 2016, 41% of all bermudagrass producers projected having less than adequate supplies, compared with 58% last year and 48% in 2014. Half the growers with greater than 600 acres expect an adequate bermudagrass supply, while 64% of producers with 600 acres or less project having sufficient inventories. For 2016, bermudagrass supply will be marginal.

Environmental and economic pressures during the early spring could quickly change inventories, leaving less grass available than anticipated.

According to this year's survey, the number of producers growing zoysiagrass (82%) was an increase over the last four years. This is a species that continues to grow in popularity and number of cultivars available to the consumer. There are at least sixteen zoysiagrass cultivars being grown in Georgia. Of the producers responding, 64% estimate an adequate to excellent inventory, which is up from last year's estimate (Figure 2). For early spring 2016, 36% of the zoysiagrass producers project a shortage of grass.

Of the 17 producers surveyed 8 (47%) were growers of centipedegrass. Fifty percent of the growers had adequate inventory compared to 33% in 2015, and 65% in 2014. No producer has an excellent supply of centipedegrass in 2016. Of the larger growers, 2 of 3 growers with greater than 900 acres expect an adequate centipedegrass supply.

St. Augustinegrass is being grown by 5 of the 17 producers surveyed. Eighty percent reported an insufficient supply, including the three growers with greater than 600 acres in total turfgrass production.

Higher than previous years, tall fescue was grown by 47% of producers. Eighty-eight percent of tall fescue producers reported excellent to adequate inventory, which continues a twelve-year trend of sufficient tall fescue supply. The amount of tall fescue sod grown in Georgia meets demand.

Sod Prices

For 2016, the on-the-farm and delivered prices for all five grass species were greater than 2015. Grass prices are forecast to increase 4% to 15% over last year's prices (Table 1). Figure 3 provides a five-year perspective of sod prices, all grass species 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 2016 survey indicated prices varied from 25.0 cents to 41.0 cents, with an average price of 31.7 cents (Table 2). The average price in 2015 was 27.8 cents per square foot and ranged from 19.0 cents to 44.0 cents.

The 2016 average price for a delivered truckload of zoysiagrass increased from 2015 levels. The average price of delivered zoysiagrass in 2016 was 49.4 cents and ranged from 35.0 to 57.0 cents. In 2015 zoysiagrass prices ranged from 35.0 to 56.0 cents and averaged 44.1 cents.

Centipedegrass prices rose too. Prices in 2016 ranged from 30.0 cents to 38.0 cents and averaged 33.9 cents, compared to 2015 when the average delivered price was 30.1 cents and ranged from 22.0 to 45.0 cents.

The 2016 delivered price of tall fescue increased. This year, prices ranged from 27.0 cents to 41.0 cents, with an average of 34.9 cents. Both the low- and high-end prices were greater than 2015.

The price of delivered St. Augustinegrass increased in 2016. The average price of delivered St. Augustinegrass in 2016 was 45.3 cents and ranged from 38.0 to 55.0 cents. In 2015, St. Augustinegrass prices ranged from 38.0 to 45.0 cents and averaged 43.6 cents.

Regarding grower price expectations, most growers (88%) are not forecasting a price decrease in 2016. Fifty-three percent of bermudagrass producers expect stable prices during the first five months of 2016. This is a decrease from 2015 and 2014 where 81% and 72%, respectively, expected rising prices. For zoysiagrass, 64% of producers anticipate stable prices during the first five months of 2016; 36% of producers forecast higher prices. For centipedegrass and tall fescue, all producers expect prices to remain constant in 2016. Eighty-three percent of St. Augustinegrass producers expect constant prices.

Certification

2016 had 15 producers representing 88% of the respondents with some certified grass on their farm (Table 3). Eighty-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 nine-year trend of increasing average prices for certified grass (Table 3). In 2016, the typical extra cost ranged from 1.0 to 7.0 cents per square foot and averaged 4.0 cents. This translates to between $5.00 and $35.00 on a 500 square foot pallet. Disregarding 2013 which had an anomaly in value of certified grass, for 2016 the high end of the range was up relative to the past five years. The lower end has remained constant at 1.0 cent per square foot. The average price rising indicates more certified producers are increasing the value of their grass. The consumer should consider this an accepted cost to ensure varietal purity of a perennial species.

Freight and Unloading Fees

Freight rates per mile shipped to Atlanta, or within 100 miles of the farm, stabilized in 2016 (Table 4). Costs ranged from $3.00 to $4.50 and averaged $3.70, equivalent to last year's average fee. A separate freight rate is charged by 41% of the respondents.

Seven respondents (41%) reported charging an unloading fee in 2016, similar to 2015. The minimum unloading fee ($40) did not change from 2015 but most producers are now charging between $75 and $150. Many producers (59%) will make additional drops on a load. The low-end charge was up to $35 in 2016, compared to $20 in 2015. The high-end charge declined from $125 in 2015 to $75 in 2016. The average cost for additional drops in 2016 was $63.50, similar to last year's cost.

Fuel Surcharge

In a dramatic change, only one respondent reported adding a fuel surcharge to a load in 2016. In 2015, 26% of producers, which doubled from 2014, were adding this charge. Figure 4 compares the average sod price for all species grown with the average annual retail price for gasoline and diesel fuel. Over the past 10 years, this is the first time sod prices are outpacing fuel prices. This will likely continue among reports of continued falling fuel prices during the first-half of 2016.

Markets

The 17 producers that participated in this survey estimated that the highest amount of sod was sold to landscape contractors (Table 5). This has not changed over the ten years this question has been included in the survey. In 2015, sports / athletic fields were the fifth largest industry segment for sale of turfgrass but moved into the second position this year. The groups with the greatest gain over last year were sales to the sports and athletic fields and golf courses, moving from the 5th rank to the 2nd and 7th to 4th respectively. The group with the greatest decline was last year's greatest gainer. Sales to landscape designers sank from the 3nd rank to the 8th.

Acreage in Production

For the first time in six years sod producers were not asked if they had removed land from production during the previous year. This was because over the past two years no producer had indicated there was an intention of removing land from sod production.

Instead, 57% of the growers indicated they plan to add acres in 2016. The volume of new grass potentially being added to production fields ranged from 25 acres to 300 acres with a total of 725 acres being added this coming growing season. However, this addition would not affect the market until 2017 or 2018.

Summary

From this survey it appears that prices for all species will continue a three-year increase. However, inventory for all warm-season species is expected to improve over the previous two years.

Observations and trends over the past fifteen 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 has not been the case for the last three years, 2016 included. Although total acres in turfgrass production are rebounding, relative to pre-recession levels there are still between 45% and 52% fewer acres in turfgrass production. It will simply take time for inventory to recover even with a continued effort of growers to increase acreage. In the meantime, prices will remain high and potentially rise further.

Don't let sticker shock curtail projects, plan ahead. If projects are planned for 2016 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 2015 to 2016.

	On-the-farm			Delivered*		
Turfgrasses	**2015**	**2016**	**% Change**	**2015**	**2016**	**% Change**
	------ Cents / ft^2 ------			------- Cents / ft^2 -------		
Bermudagrass	22.6	25.5	12.8	27.8	31.7	14.0
Zoysiagrass	38.5	42.6	10.7	44.1	49.4	12.0
Centipedegrass	23.4	26.9	15.0	30.1	33.9	12.6
Tall Fescue	28.0	29.3	4.6	31.9	34.9	9.4
St. Augustinegrass	37.6	39.3	4.5	43.6	45.3	3.9

* 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, 2016.

	On-the-farm		Delivered*	
Turfgrasses	**Price (avg.)**	**Range**	**Price (avg.)**	**Range**
	------------------------------ Cents / ft^2 ------------------------------			
Bermudagrass	25.5	18.0 – 38.0	31.7	25.0 – 41.0
Zoysiagrass	42.6	30.0 – 56.0	49.4	35.0 – 57.0
Centipedegrass	26.9	18.0 – 34.0	33.9	30.0 – 38.0
Tall Fescue	29.3	22.0 – 35.0	34.9	27.0 – 41.0
St. Augustinegrass	39.3	30.0 – 47.0	45.3	38.0 – 55.0

* 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.

	Growers with Certified Grass		Growers that charge a premium for Certified Grass			
Year	**%**	**n***	**%**	**n***	**Average**	**Range**
					--------- cents	-------------
2016	88	15	87	13	4.0	1.0 – 7.0
2015	76	19	55	11	3.0	1.0 – 6.0
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

* Total number of respondents 17, 26, 35, 42, and 40 for 2016, 2015, 2014, 2013, and 2012 respectively.

Table 4. Historical freight rate for sod deliveries.

Year	**Range**	**Average**	**% Change**
	---------- $ / mile	--------	
2016	3.00 – 4.50	3.70	-1.1
2015	2.00 – 5.86	3.74	16.9
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

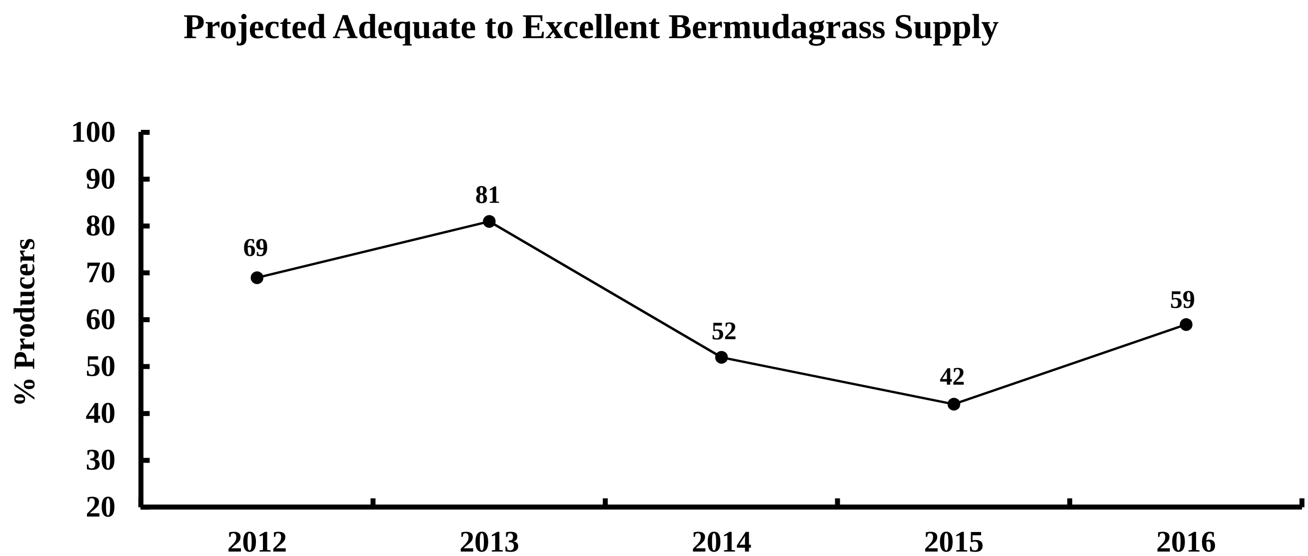
* Delivered price includes freight and pallets. The delivered price included the Atlanta area or within 100 miles of the farm.

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

	2016		2015	
Industry segments	**Rank**	**Average***	**Rank**	**Average***
Landscape Contractors	1	43.1	1	48.5
Sports / Athletic Fields	2	18.9	5	16.8
Brokers	3	15.5	2	26.7
Golf Courses	4	14.7	7	13.3
Existing Developers	5	12.7	4	17.9
Garden Centers	6	12.2	8	8.3
Homeowners	7	11.4	6	16.6
Landscape Designers	8	10.5	3	23.7

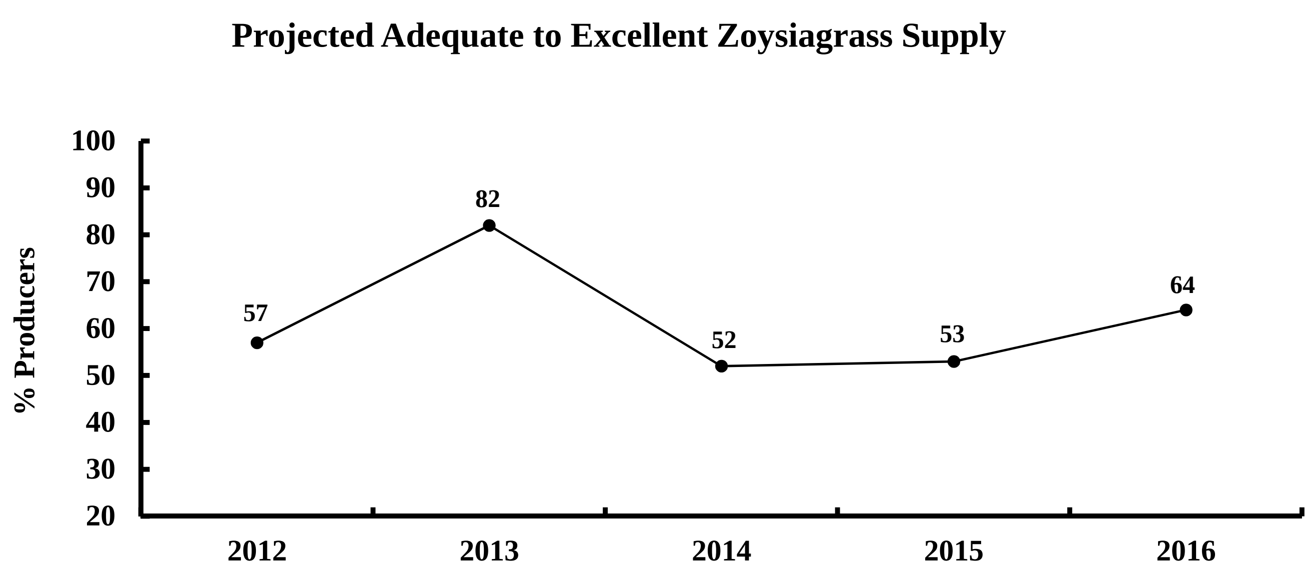
* Average percentage of total sales.

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, 2012 to 2016.

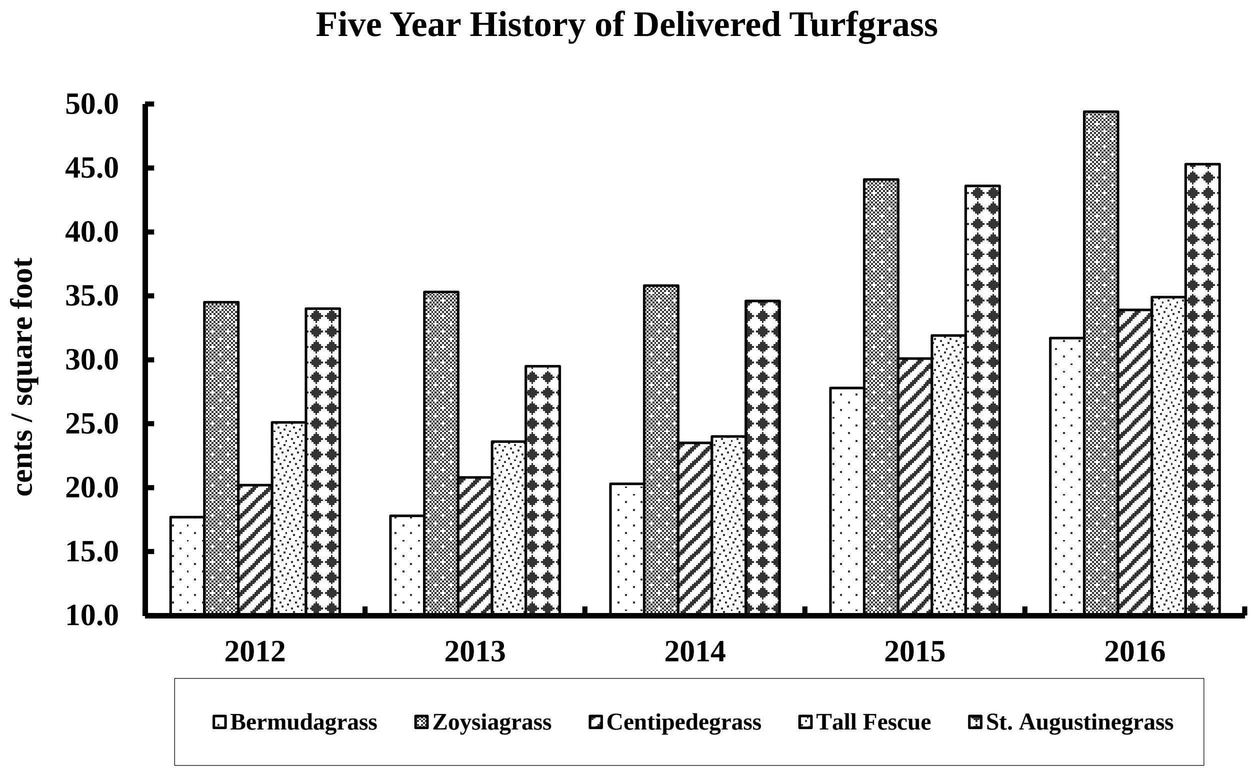
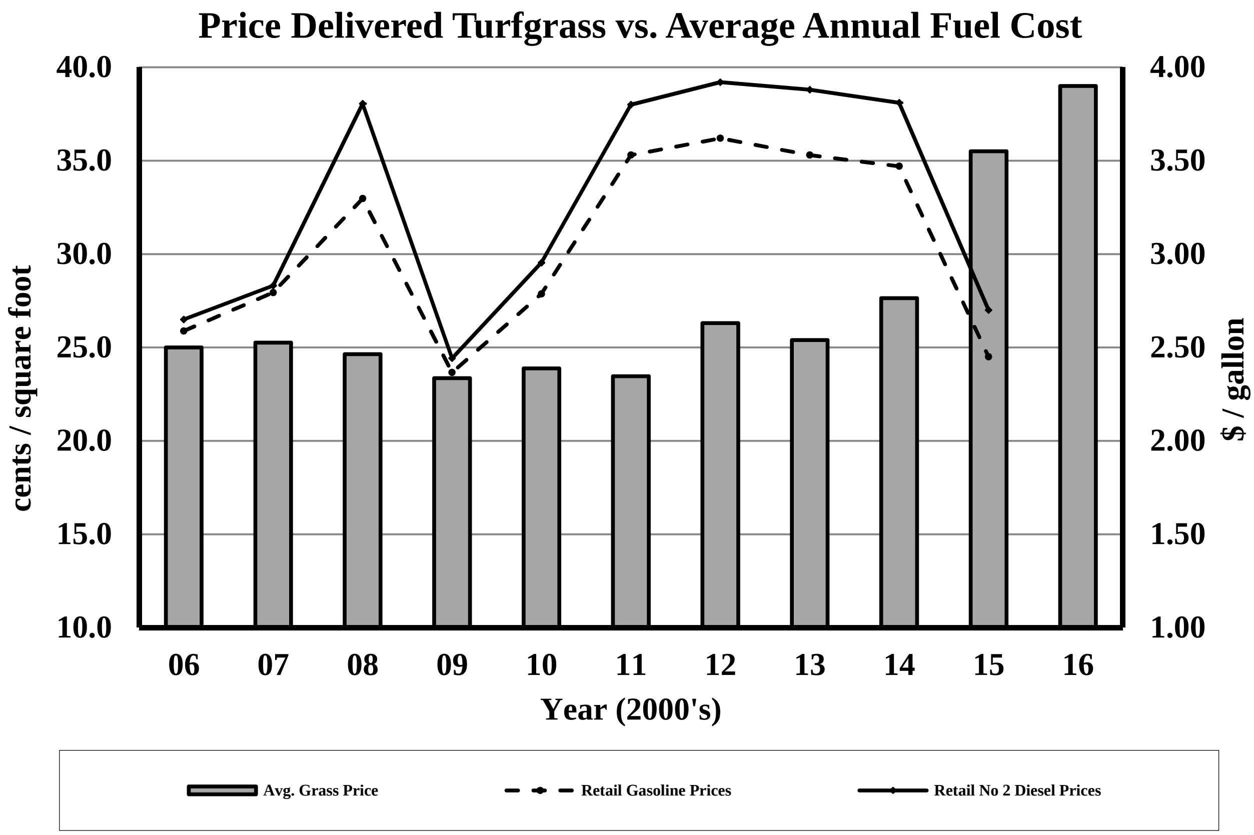


Figure 4. Ten year comparison of average sod price with fuel cost.



* 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 2015, the average retail fuel cost was calculated through December 1.

Bullet Points from the 2016 Sod Producers Inventory Survey

1. Supply of warm-season turfgrasses looks to have a marginal improvement.
2. For bermudagrass, half the larger growers predict a poor supply for early 2016.
3. The delivered price for all grasses is expected to increase.
4. Grass prices continue at historic levels.
5. Growers anticipate stabilizing prices through 2016.
6. 2016 continues a nine year trend of increasing average prices for certified grass.
7. Paying more for certified grasses provides the end-consumer assurance they are receiving varietal purity.
8. Freight rates per mile shipped to Atlanta, or within 100 miles of the farm, will remain constant.
9. More turfgrass acreage will come into production in 2016.
10. The primary markets for Georgia sod are landscape contractors and sports fields.
11. Get price quotes regularly.
12. If possible “book” or lock prices to ensure availability and price.