2010, Annual Georgia Sod Producers Inventory Survey<br>Clint Waltz and B. J. Johnson<br>The University of Georgia

In January, the Georgia Sod Producers Association conducted their sixteenth consecutive survey of sod producers. The purpose of the survey was to determine the status of inventory levels and projected price changes for spring 2010. This was the third year of a change of categories, an additional grower category was added in 2008 to account for growth in the industry and the impact larger growers tend to have on the marketplace. Forty-four producers participated by telephone and written / fax survey, representing farm sizes which were less than 300 acres (22 participants), 300 to 600 acres (16 participants), 601 to 900 acres ( 2 participants), and more than 1,200 acres (4 participants). Likely due to reductions in acreage and farms getting out of the business, the grower category of 901 to 1,200 acres did not have any respondents this year.

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 2010 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 93\% of the surveyed producers. Inventory levels had stabilized through the early part of the decade then increased in 2008 but are expected to decrease slightly from 2009 levels (Figure 1). Eighty-eight percent of the producers rated their inventory as adequate to excellent this year. For 2010, 12\% of all bermudagrass producers projected having less than adequate supplies, compared with 9\% last year and 15\% in 2008. Three growers, same as 2009, with greater than 1,200 acres expect adequate to excellent supplies, while only one
anticipates a shortfall of bermudagrass for the first five months of the year. Likewise, 15 of the 16 producers surveyed with 300 to 600 acres project a sufficient supply.

According to this year's survey, the number of producers growing zoysiagrass (57\%) was an increase from 2009 (48\%). Of the producers responding, 80\% estimate an adequate to excellent inventory which continues an increase in supply from 2008. For 2010, 20\% of the zoysiagrass producers project a shortage of grass during early 2010, all of which are producers with less than 600 acres. All of the producers with greater than 1,200 acres in production anticipate an ample supply of zoysiagrass.

Of the 44 producers surveyed 28 (64\%) were growers of centipedegrass, less than the last three years. One-hundred percent of the growers had adequate to excellent inventory compared to 80\% in 2009, and 84\% in 2008. It appears the adjustments made by larger producers during 2006 continue to meet market demand.

St. Augustinegrass is being grown by 10 of the 44 producers surveyed. Unlike previous years where only the larger producers had inventories, this is the second year each of the lower three categories also had a growers of St. Augustinegrass. Of the producers, $80 \%$ reported adequate to sufficient supply. Overall, two growers with less than 600 acres forecast a St. Augustinegrass shortage, while the two growers with greater than 1,200 acres in turfgrass production have an adequate to excellent supply.

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

For 2010, the on-the-farm prices for bermudagrass, zoysiagrass, centipedegrass, and tall
fescue had less than $3 \%$ change from 2009 prices, $1.7 \%, 0.8 \%,-1.3 \%$, and $2.8 \%$ respectively (Table 1). Similarly, there was little change in the delivered price for bermudagrass and zoysiagrass, $0.0 \%$ and $-0.6 \%$ respectively. Delivered centipedegrass fell $-7.6 \%$ but tall fescue jumped 14.7\%. St. Augustinegrass had the greatest decline from 2009 to 2010 with on-the-farm prices, falling $-8.8 \%$, however the delivered price rose $4.1 \%$. 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, was the same from the previous year (Table 1). This year's average delivery price was similar to prices in 2006 (Figure 2). The 2010 survey indicated prices varied from 13.5 cents to 24.0 cents, with an average price of 16.1 cents (Table 2). The average price in 2008 was 17.5 cents per square foot and ranged from 13.5 cents to 25.0 cents.

The 2010 average price for a delivered truckload of zoysiagrass remained consistent with 2009 levels. The average price of delivered zoysiagrass in 2010 was 32.1 cents and ranged from 24.0 to 38.0 cents. In 2009 zoysiagrass prices ranged from 22.0 to 40.0 cents and averaged 32.3 cents. Previously, zoysiagrass producers predicted a shortage which has likely lead to price increases. 2008, 2009, and 2010 have had predicted sufficient supplies, likely leading to lower prices.

For the third consecutive year, following three consecutive years of rising prices for delivered centipedegrass, prices fell (-7.6\%) in 2010. Prices in 2010 ranged from 13.0 cents to 30.0 cents and averaged 18.2 cents, compared to 2009 when the average delivered price was 19.7 cents and ranged from 16.0 to 27.0 cents. Between the last three years, the overall average price declined each year with this year's price being $-15 \%$ lower than 2007 prices ( 21.3 cents).

The 2010 delivered price of tall fescue increased (14.7\%), which reversed last year's -
$17.2 \%$ decline in price from the previous year. This year, prices ranged from 20.0 cents to 36.5 cents, with an average of 24.9 cents. The low- and top-end price increased 5 cents and 8.5 cents respectively.

For two consecutive years, the price of delivered St. Augustinegrass increased. Although, this year’s gain (4.1\%) was half of the 2008 to 2009 increase (8.4\%). The average price of delivered St. Augustinegrass in 2010 was 28.1 cents and ranged from 21.0 to 32.3 cents. In 2009 St. Augustinegrass prices ranged from 18.0 to 35.0 cents and averaged 27.0 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 with a $10.7 \%$ increase from the previous year, to years like 2008 where prices fell $-17.5 \%$.

Regarding grower price expectations, 75\% expect bermudagrass prices to remain unchanged while $15 \%$ expect a decrease. Ten percent of bermudagrass producers foresee a bermudagrass price increase during the first five months of 2010. This is similar to 2008 where $44 \%$ expected constant prices while $9 \%$ anticipated an increase. For zoysiagrass, $15 \%$ of producers anticipate rising prices during the first five months of 2010, while $7 \%$ forecast a decrease. Most St. Augustinegrass and tall fescue producers anticipate constant prices, 92\% and $80 \%$ respectively. Sixty-nine percent of centipedegrass producers expect prices to remain unchanged; however, $28 \%$ are preparing for a price reduction which is likely a response to ample inventory. Considering the "big 3 " species (i.e. bermudagrass, centipedegrass, and zoysiagrass), only $17 \%$ of the growers expect declining prices in 2010. This estimate is down from $28 \%$ a year ago.

Down from 2009, 2010 had 31 producers representing 70\% of the respondents with some certified grass on their farm (Table 3). Forty-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. In 2010, the typical extra cost ranged from 1.0 to 3.0 cents per square foot and averaged 1.5 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 2010 (Table 4). Costs ranged from $\$ 1.00$ to $\$ 6.00$ but averaged $\$ 2.70$; this is a $-17.7 \%$ decrease from the 2009 average (\$3.28). Respondents which included freight costs (82\%) as a part of price quotes for customers increased from 2008 and 2009 levels (74\%). A decreasing number of producers are charging an unloading fee on first drops. Twelve respondents charge an unloading fee. The minimum unloading fee (\$35) rose in 2010 but most producers charge between $\$ 50$ and \$75. Nearly all producers (90\%) will make additional drops on a load. The low-end charge rose to $\$ 20$ in 2010, from $\$ 15$ in 2009. The high-end charge remained steady at $\$ 75$ between 2009 and 2010. The average cost for additional drops in 2010 was $\$ 43.40$, essentially no change from 2009 (\$43.44).

Continuing a two year decline, $11 \%$ reported adding a fuel surcharge to a load in 2010. In 2009 the number of producers adding this charge was $28 \%$ which was down from $46 \%$ in 2008. This year, the surcharge was $\$ 50$ per load.

The 44 producers that participated in this survey estimated that the highest amount of sod was sold to landscape contractors (42\%), about the same percentage as last year (Table 5). The
average percentage of sales to homeowners increased in 2010 to $15 \%$, the second consecutive year this group held the number 2 position. Sports fields took the third position in this year's survey and saw the greatest gain from a year ago when it was ranked $7^{\text {th }}$. This year sports and athletic fields are expected to account for $11.0 \%$ of sales. In 2008, brokers were the second largest industry segment for sale of turfgrass, but in 2010 this group accounted for $7 \%$ of sales, lowering their rank to $6^{\text {th }}$.

In last year's and this year's survey, amid reports of farms being sold, acres being taken out of turfgrass production, and long-time producers going out of business, two ancillary questions were included. The first was "Did you reduce sod production (acres) in 2008 and 2009 due to the economy?" Last year 55\% of the respondents answered that they removed some acreage on their farms. On this year's survey $40 \%$ responded that they had removed turfgrass acreage from production. Unfortunately it is unclear if this was $40 \%$ beyond what was removed in 2008 or purely relative to 2008 levels. The second question was "how much?" The average grower removed $30 \%$ of their acreage from sod production in 2008. In 2009, the average decreased to $17 \%$. This year's mode (i.e. most common response) was 5 of the 12 respondents projected removing $20 \%$ of their fields from turfgrass production. Overall, the reductions ranged from $10 \%$ to $25 \%$.

For fun, this year growers were also asked to forecast the economic recovery - their insight is as good as anyone's. Four growers would not offer a prognostication, while one grower does not foresee an economic rebound until 2014. The greatest number of growers (58\%) does not believe a recovery will occur until 2011. The most optimistic group (20\%) foresees the recovery during 2010. For the sake of the industry, let us all hope their crystal ball was cleaned with industrial strength Windex and they are seeing clearly.

While prices remain repressed relative to just a few years ago and inventory levels appear to be adequately sufficient, expectations of producers seem a bit improved. Lower expectations of price declines for the "big 3" are less than they were a year ago, fewer acres are being removed by fewer producers, and the drought ended. Furthermore, jumps from historically lower ranked markets, especially sports fields, indicate opportunities as projects from stimulus money or special purpose local option sales tax (SPLOST) funds come to fruition. Additionally, reports of the rise in the sale of new homes, extension of the tax credit for first-time home buyers to April 2010, and an increase in the application of building permits begin to point to a recovery of the housing market. Compared to the 2009 sod producer's survey, this year's results coupled with positive economic indicators offer some optimism.

Table 1. Change in prices from 2009 to 2010.


Delivered price includes freight and pallets. In 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 2. Comparison of on-the-farm prices with delivered prices, 2010.

| Turfgrasses | On-the-farm |  | Delivered* |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Price <br> (avg.) | Range | Price <br> (avg.) | Range |
| ------------------------------ Cents / ft ${ }^{2}$ |  |  |  |  |
| Bermudagrass | 11.7 | 8.5-20.0 | 16.1 | 13.5-24.0 |
| Zoysiagrass | 26.1 | 14.5-35.0 | 32.1 | 24.0-38.0 |
| Centipedegrass | 15.2 | 12.0-25.0 | 18.2 | $13.0-30.0$ |
| Tall Fescue | 18.4 | 12.0-22.0 | 24.9 | 20.0-36.5 |
| St. Augustinegrass | 21.7 | 15.0-27.0 | 28.1 | $21.0-32.3$ |
| Delivered price includes freight and pallets. In 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 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 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | $\mathbf{n}^{*}$ | \% | $\mathrm{n}^{*}$ | Average | Range |
|  |  |  |  |  | --------- | ----------- |
| 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 44, 52, 32, and 48 for 2010, 2009, 2008, and 2007 respectively.

Table 4. Historical freight rate for sod deliveries.

| Year | Range | Average | \% Change |
| :--- | :---: | :---: | :---: |
|  | $--------9 /$ mile -------- |  |  |
| 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 |
| 2006 | $1.80-3.35$ | 2.31 | 18.5 |

Delivered price includes freight and pallets. In 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.

|  | $\mathbf{2 0 1 0}$ |  |  | $\mathbf{2 0 0 9}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Industry segments | Rank | Average $^{*}$ |  | Rank | Average $^{*}$ |
| Landscape Contractors | 1 | 42.0 |  | 1 | 41.8 |
| Homeowners | 2 | 15.0 |  | 2 | 11.8 |
| Sports / Athletic Fields | 3 | 11.0 |  | 7 | 5.6 |
| Golf Courses | 4 | 8.8 |  | 3 | 11.4 |
| Existing Developers | 4 | 8.8 |  | 5 | 7.4 |
| Brokers | 6 | 7.0 |  | 4 | 8.0 |
| Garden Centers | 7 | 6.3 |  | 6 | 7.0 |
| Landscape Designers | 8 | 2.0 |  | 8 | 3.2 |

Average percentage of total sales.

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

## Projected Adequate to Excellent Bermudagrass Supply



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

Figure 2. Historical perspective of sod prices in Georgia, 2006 to 2010.
Five Year History of Delivered Turfgrass


