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UGA Center for Urban Agriculture

**Economic Impact of the Drought on Urban
Agriculture Industries**

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Economic Impact of the Drought on Urban Agriculture Industries

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In an effort to assess the impact of the current drought on industries involved in urban agriculture, the Urban Agriculture Council (UAC) created an on-line survey using SurveyMonkey.com (<http://www.surveymonkey.com/>). This service allows the user to create the survey on-line and email it to clients. The client can quickly fill out the survey on-line. The service then compiles the results to allow for quick analysis and easy downloading.

The survey was emailed to the members of the associations which make up the UAC. This includes the Coastal Landscape and Turf Professional Association (CLTPA), and the Georgia Irrigation Association (GIA), Georgia Green Industry Association (GGIA), the Georgia Sod Producers Association (GSPA), the Georgia Turfgrass Association (GTA), and the Metro Atlanta Landscape and Turf Association (MALTA).

It is estimated that more than 1,500 individuals received the survey. The results are summarized in Tables 1 and 2 and are based on 353 of the responses. Respondents represented companies involved in irrigation, wholesale production, landscape installation and maintenance, garden retail sales, wholesale, re-wholesale, greenhouse production, sod production, turf maintenance, and the golf industry.

All responses to this survey were made between October 4 and October 8. This was only six days after the northern one-third of the state was issued a Level Four Drought Response and may not reflect the full impact on Urban Agriculture Industries. One might expect the adverse impact of the drought and water restrictions to intensify with time.

Urban Agriculture has grown steadily as the population of Georgia has increased. Though it is difficult to assess the strength of this agricultural sector, best estimates put the number of firms at approximately 7,000 with \$8.16 billion in revenue in 2005

(<http://apps.caes.uga.edu/urbanag/indeconomics.cfm>). Flanders and McKissick (<http://www.caed.uga.edu/publications/2007/pdf/CR-07-06.pdf>) estimated the landscape service sector (businesses which provide landscape maintenance and installation) in Cobb, DeKalb, Fulton, and Gwinnett counties with a total output of \$1.4 billion in 2005, exceeding all Georgia farm gate crop values for that year.

The results of this survey suggest that previous estimates of the economic impact of Urban Agriculture in Georgia may be low. When the reported income from these 353 businesses is used to estimate the income of 7,000 businesses via extrapolation, the estimated revenue of Urban Agriculture in Georgia is just over \$14 billion (Table 1).

The drought is clearly reducing income and increasing layoffs in Urban Agricultural Industries. Table 1 chronicles the survey results of the economic impact of the drought and subsequent water restrictions on income. The mean is the average; the median is midpoint, half of the respondents were below that value and half were above it. The average earnings per company in 2006 were just over \$6 million dollars for the industry with a range of \$361.00 to \$107 million. Half of the firms reported earnings less than \$800,000. This is as expected; many Urban Agriculture Industries are relatively small.

The average estimated income loss due to the drought is 43%, but the median loss of 15% indicates that this pain is not felt equally across all sectors of the industry. For example, the nursery and plant wholesale businesses have significant financial investments in plant materials which are no longer selling and are incurring catastrophic losses. Other segments, such as landscape maintenance and the golf industry are less affected. However, the impact of a 15% reduction in revenue on a small business should not be underestimated.

The drought has taken a toll on the employees as well, with companies averaging six layoffs per firm but anticipating 11 layoffs by the end of the year (Table 2). Flanders and McKissick’s estimated average income for landscape workers was \$26,757. If this value is representative of the industry, the lost wages due to more than 24,000 layoffs could come to \$644 million by year’s end. Additionally, there were significant reductions in hours of operation and the labor hours presumably resulting in decreased wages for those still employed.

The impact of Georgia’s drought and subsequent water restrictions will be felt throughout the region and in many other parts of the nation. The large market of North Georgia consumes goods and services from around the country.

Table 1. Impact of drought and water restrictions on company income.

	Actual Income 2006	Estimated Income 2007	2007 losses to Date ¹ Percentage	Actual 2007 to Date Losses ¹	Total Estimated Losses 2007
Total	\$711,763,781	\$703,769,967		\$54,814,003	\$60,134,220
Mean ²	\$6,242,107	\$6,118,651	43	\$480,824	\$532,161
Median ²	\$800,000	\$825,000	15	\$70,000	\$100,000
Extrapolation to Industry ³	\$14,114,295,941	\$13,955,778,382		\$1,086,963,232	\$1,192,463,286

¹ Surveys were filled out between October 4 and 8 and reflects conditions at that time

² Per company.

³ Calculated as follows: Total * (7,000/353).

Table 2. Impact of the drought and water restrictions on employment and hours of operation.

	Average Number of Employees in 2006	Employees Currently Working ¹	Employees Released to Date ¹	Anticipated Employees Released by Year's End	Current Reduction in Number of Operational Hours per Week ¹	Current Reduction in Labor Hours/Man Hours ¹
Total	8635	8134	696	1215	3630	17524
Mean ²	71	66	6	11	45	187
Median ²	12	10	1	2	5	21
Extrapolation to industry ³	171,232	161,297	13,791	24,083	71,983	347,491

¹ Surveys were filled out between October 4 and 8 and reflects conditions at that time.

² Per company

³ Calculated as follows: Total * (7,000/353).