

Initial Impacts of Hurricane Michael ON THE GREEN INDUSTRY

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Hurricanes are responsible for a large percentage of natural disaster-related damage to both crops and infrastructure in agricultural industries located in the Southeastern U.S. This is especially evident in consideration of the effects of Hurricane Michael on Georgia's green industry, which sustained substantial impacts. Initial damage due to outright destruction of plant material and structures is currently estimated to be around \$13 million, and that dollar amount is likely to increase as damage assessments continue. At more than \$550 million, the green industry (including container nursery, field nursery, greenhouse, and turf) has the fifth-largest agricultural farm gate value in Georgia.

Economic damage estimates were obtained from 19 growers, most of whom were in counties under a declaration of emergency.

Damage was extrapolated based on the hurricane's path and the severity of losses. The majority of the destruction was located in southwest Georgia (in Seminole, Decatur, Grady, Mitchell, Baker, Miller, and Early counties) due to sustained winds between 50-90 mph with gusts reaching 110 mph. Estimated damage at individual facilities ranged from minimal damage to \$700,000 for each firm surveyed. Despite this economic setback, green industry growers and professionals are optimistic about the recovery of the industry. Firms are diligently working to repair damage and replenish plant stocks. Most firm owners believe that they will be up and running at capacity soon.



Figure 1. Wind damage on plant stock due to Hurricane Michael.

The majority of initial-estimate losses were due to infrastructure damage, with firms reporting multiple building collapses, roof damage, and irrigation system damage. In the declared disaster area, virtually all plastic and/or shade houses were severely damaged or destroyed.

Significant labor costs were also incurred in the aftermath of the hurricane. Live plant material needed to be picked up, sorted, and placed near working water sources in a timely manner to prevent additional losses. The cleanup required a significant amount of man power and overtime for current employees. In some cases, temporary employees were hired to help with the salvage process.

Many firms will incur significant costs for the replacement supplies necessary for staking, straightening, and replanting rescued stock plants. Plant mortality and/or damage that renders plants unsalable was initially (7 to ten days post-event) thought to be minimal, with surveys reporting less than 20 percent loss in severe cases. The incurred plant damage will be an additional economic burden on firms that will not be clarified until future seasons or beyond.

Horticulturists and agricultural economists have continued to monitor plant health weekly at several firms in the disaster area since the event occurred. It is important for nursery growers to maintain diligent photographic and written documentation of crop status for months after a natural disaster and to regularly communicate losses with appropriate personnel from insurers, the U.S. Department of Agriculture, lending agencies, and University of Georgia Cooperative Extension.



Figure 2. Infrastructural damage due to Hurricane Michael.

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