



Post-Hurricane Considerations for the Commercial Nursery¹

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Operators of hurricane-damaged nurseries are faced with the task of re-establishing physical resources such as buildings, plant inventory and equipment as well as considerations regarding future fiscal or business decisions. They must evaluate their own situation and quickly decide on long- and short-term priorities. Immediately, the needs of employees must be considered and resources provided so that once their lives return to some semblance of "normal", they can concentrate on re-establishing the nursery.

Short-term Considerations

Irrigation

Irrigation of salvageable container plants or plants planted after the hurricane is a short-term priority. Water resources suddenly become even more valuable after a hurricane because of possible contamination with salt water and the difficulty in delivering water to plants via damaged or destroyed irrigation systems. It seems ironic that too much water contributes to destruction one day, yet a few days after a hurricane irrigation water may be difficult to obtain. However, the irrigation water at your nursery may not be contaminated by salt-water

blown into surface reservoirs or by salt-water intrusion of wells. Water with an electrical conductivity 1.5-2 dS/m (mmhos/cm) should be marginally suited for irrigation of most nursery crops; however, the conductivity of the container substrate should be monitored periodically even if water with 1.0 dS/m conductivity is used. A container substrate with electrical conductivities of 0.5-1.0 dS/m are considered optimum. Temporary pipes, such as aluminum pipes, can be laid overland and water delivered via large irrigation guns if the nursery irrigation piping system was destroyed. Electrical generators or tractors can be used to power water pumps.

Disaster Assistance

Contact your insurance agents and apply for disaster assistance. Assistance may be available from local banks and federal lending agencies such as the Farm Service Agency. Contact the Natural Resources Conservation Service regarding field soil drainage, irrigation, and water flow concerns. These agencies are listed in the phone book under Federal Government.

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Property damage should be documented with photographs or videos. If possible, include an identifier in the photographs. The identifier associates the damage with you nursery. A house or barn in the background of a picture could be an identifier. In addition, you may want to include an insurance agent or other persons in photographs; these people can verify your claims.

Assess your inventory while placing plants upright so you can account for plants that are not only non-salable, but those that were lost from the property. Some plants may recover while others may die in a few days or weeks. Therefore, do not settle claims immediately, but ask for a partial settlement initially. Claiming loss for physical structures and equipment is usually obvious, but also consider damage to supply inventories such as containers, fertilizers, and pesticides. Check to see if fertilizers or pesticides were mixed or damaged. Consider insurance claims or financial assistance for the replacement of those items as well as disposal and cleanup.

Plant Culture

Short-term production efforts should concentrate on removing plants from flooded areas, providing shade where needed, and preparing inventory for sale. Compact, low growing plants generally survive a hurricane with less damage than more upright plants. Damaged plants may need pruning or shaping. Wind defoliated plants should generate new leaves within a few weeks.

Nurseries that grow plants in field soil should sample the soil to determine if salt levels could result in plant damage. Soil samples may be sent to commercial laboratories or the land-grant University Extension Service Laboratory in you state. Irrigation water should have an electrical conductivity less than 2.0 dS/m when used to mitigate salts in field soils.

Future sales should be good, since plants in many landscapes will need to be replaced. Therefore, a short-term consideration is to purchase young plants that can be grown for future sales. Another option is to purchase mature plants for re-wholesaling. Both options will increase volume or inventory for future sales, but additional employees may be needed for a

limited time. In addition, land and equipment can also be leased.

Long-Term Considerations

Long-term priorities should concentrate on the direction or focus of the nursery for the future. Now is the time to consider changes you thought about in the past and would implement only if you had the opportunity to start over, but proceed with thoughtful considerations. Develop a business plan considering future markets. For example, you may change the predominant size of marketable plants or add additional cultivars to penetrate a new market, such as plants for water-conserving landscapes. You should also consider advancements in technology and make changes based on the most recent research-based information. Some questions to ask yourself include: Can low volume irrigation be used? Are irrigation runoff recovery ponds and systems for recycling water needed? Do fuel and pesticide storage and pesticide mix/load facilities comply with current guidelines? The university extension office in your county has numerous resources that can help you select and implement technological advancements appropriate for you nursery. Now is the time to make changes for a prosperous and rewarding future!

Additional Reading

Hanlon, E. A., G. Kidder and B. Mc Neal. 1990. Soil, container media, and water testing. Interpretations and IFAS standardized fertilization recommendations. Univ. Fla. Coop. Ext. Cir 817.

University of Florida, The Disaster Handbook. 1998. Gainesville, Florida. <http://disaster.ifas.ufl.edu>.

Yeager, T., D. Fare, C. Gilliam, A. Niemiera, T. Bilderback, and K. Tilt. 1997. Best Management Practices for Producing Container-Grown Plants. Southern Nursery Assoc., Atlanta, Georgia.

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