St. Augustine Orchid Society
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Greenhouse Disasters

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Orchid Growing Tips

Americans are very good at making something positive arise out of even the worst tragedy. In August, one of the best orchid growers in the Carolinas lost most of his Cattleya collection when a family of bluebirds shorted out the transformer supplying electricity to his greenhouse. For two hours during the heat of the day, this now un-vented greenhouse did what greenhouses do so well, store heat. Temperatures in the greenhouse reached at least 130 degrees F; the highest the Max/Min thermometers could record, turning once luxurious leaves and bulbs into something resembling cooked celery. A collection that took 22 years to build was destroyed in a matter of hours.

Most long-time orchid growers have a story or two of some similar disaster or near disaster. The lesson all growers must take from this tragedy is one an old, plant ecology professor stated repeatedly. It is the extremes that determine survival or death of a plant, not the average. Just a few hours of no power and a freeze or burn kills orchids. The “Jurassic Park” phenomenon is that given enough time even the most unlikely event will occur. For plants that take seven years to flower, many more years to mature, and can live indefinitely, even the most unexpected event must be anticipated. The more automated a greenhouse, the more likely is an unexpected power failure.

With this tragedy in mind, now is a good time to think about what could happen in your growing area. Even those growing inside under lights need to consider the “what ifs”. If a water line breaks in your greenhouse when you are not home and a neighbor tries to help, could he/she be electrocuted? All circuits in a greenhouse should be insulated, grounded, and be on a ground default circuit to prevent electrocution. If you have ground default circuits would such an event shut off vent fans? Inside growers too, must think about the danger of mixing electricity with water. What if a light fixture falls into your orchids? Can it contact water? Many under light growers have problems finding electrical connections with a ground. Use only grounded fixtures. Almost all electrical codes now require ground default features on any electrical circuit near water. These can be added relatively easily. Do you have children or pets than may be curious and go near electrical circuits in a greenhouse? What better reason does one need to install appropriate electrical ground fault breakers?

How many lights do you have on one circuit? If the breaker on a circuit goes off every now it is a sure bet that the circuit is either overloaded or shorting out. Have it checked by a competent electrician.

Fires too can occur in greenhouses and inside. Basement systems often enclose lighted benches to conserve heat during winter. Care must be taken to prevent a heat buildup that can not only kill your plants, but also destroy a home or garage. Recently, I found some cotton material that had fallen on the timer that controls lights over my flasks. The material had become rigid from the heat and could have easily ignited. These are the types of things that need to be considered by every serious or amateur orchid grower.

Most hobbyists that have developed collections of exhibition plants realize the difficulty of planning for every possible disaster. To avoid the loss of prized clones, trading or giving divisions to other growers not only expands a collection, but provides some insurance than a prized clone can be retrieved if the worst case scenario occurs. Fortunately, the Carolina

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grower that lost his collection had been extremely generous over the years so that not all his unique clones were lost.

Hurricanes, floods, tornadoes, and even falling trees have destroyed orchid collections over the years. A number of famous commercial nurseries such as the firm of Lager & Hurel (power failure) and Jones & Scully (hurricane) have been lost. The first response to such disasters is, of course, sadness for the loss. The second, however, should be to realize that such events occur all the time and to use this tragedy to prevent one in your own growing area.

Cooler and hopefully, wetter weather is almost here. If your collection is small enough increase the time between watering for Cattleyas that have mature bulbs and keep fertilizing those that are actively growing new bulbs. Most Cattleyas love night temperatures in the mid 50s, but these same temperatures will tell Phals and Vandas to slow growth. Phals will stop growth and begin to grow flower spikes once they get a few cool nights. If possible keep Phal seedlings a little warmer so that they can put on a few more leaves before beginning their flowering cycle. And…watch out for those early, unexpected freezes even though they never happen in September.