Communicating Landscape Freeze Damage to the Public in Charlotte County

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The freezing and frosty weather of January, February, and March 2010 saw some nighttime temperatures in the 30s and as low as 23 °F in the Charlotte County area. This was the second year in a row with widespread damaging freezes. The 2010 cold spell was worse, however, with longer cold temperatures that certainly laid waste to our local landscapes. Communicating how to deal with our potentially cold weather in Charlotte County is an annual event. Besides communicating verbally to our customers on the phone, in person and in group programming, we expanded our outreach with additional written media releases and by using electronic media and techniques to take advantage of this “teachable moment.” This was an opportunity to market Extension and educate our public as we emphasized EDIS publications through our newspaper articles, used educational slide shows on our website, and took advantage of special press releases by State Specialists. A timely group program on landscape palms, as well as a PolyCom© session with a State Specialist rounding out the educational experience related to freeze damage. In addition to a measurable spike in website hits linked to an increase in customer information searches, an electronic survey of over 500 customers was conducted related to the freeze damage which documented interesting results.

While parts of Florida can be considered sub-tropical to tropical in climatic nature, a historical fact remains that low winter temperatures can occur and frost and freeze damage to landscapes can be unpredictable and a potential force to deal with. For instance, a low of 23.0 °F was recorded on 12 Jan. 1982 in Punta Gorda (The Weather Channel.com, 2010). The winter of 2010 had the landscapes of Charlotte County, FL, in its cross-hairs. Dealing with both radiational or advective freezes, Charlotte County was in the middle of one of the worst cold damage events in decades (FAWN, 2010). Local residents were despondent and heartbroken from their devastated landscapes. Some blamed commercial landscapers for the resulting freeze damage; others insisted that code enforcement force people with dead landscapes to replant immediately. The literature examined within the University of Florida/IFAS EDIS publication website shows not only the need for consideration related to landscape plant protection and post-freeze remedies, but also attention to hardiness zones and “Right Plant, Right Place.” While communicating how to deal with less than tropical weather to the general gardening public is challenging, the tools to deliver the message are plentiful. Delivery tools at the disposal of the Charlotte County Extension Service included electronic media, written media, group programming, radio programming, one-on-one consultations, and hard-copy publication distribution. Over the years of Extension’s history, this organization has responded to weather-related issues from hurricanes to droughts with various communication media (Talg et al., 2007). While a freeze was not necessarily to the caliber of a hurricane, it was a reportable occurrence by the media and certainly affected both residential and commercial interests both esthetically and financially (Cave, 2010).

Materials and Methods

Our approaches to assisting the general gardening public, commercial and residential, was both proactive and reactive. We had obtained the “Fighting Florida’s Fickle Frost” from the Pinellas County Extension Service several years ago and had actually used it successfully in 2009. We set this up on our website homepage on 4 Jan. 2010 as the cold weather settled in for a long stay in Charlotte County. This was a great self-service tool that residents could access as needed. This was followed up by two updated newspaper articles released on 18 and 25 Jan., respectively, on general care and protection of plants and specific details on salvaging palms. The special UF/IFAS media release “How to Help Your Lawn Survive the Chill” (Trenholm et al., 2010) was also submitted to the local newspaper, which added to our numbers. “Additional Comments Regarding Cold Damage to Palms” and “Post Cold Weather Palm Problems – May 2010” (Elliott et al., 2010) were also made available.

Additionally, we began to print a supply of EDIS publications related to cold damage including “Cold Protection of Ornamental Plants” by (Ingram et al., 2010) and “Low Temperature Damage to Turf” (Trenholm, 2000) and “Treating Cold-Damaged Palms” (Meerow, 2003). Additionally, “Landscape Happenings: Cold Damage Still Unfolding” (Caldwell, 2010), and “Cold Damage of Christmas Palms” and “Cold Damage of Coconut Palms: A Pictorial” (Brown, 2010) developed by nearby County Extension Offices, were distributed.

Our Master Gardener Volunteer Live Gardening Call-In Radio Show on 26 Jan., 23 Feb., and 30 Mar. offered another soapbox to speak about freeze damage recovery. Two PolyCom© teleconference programs were hosted on 12 Jan. and 8 Mar. As part of our annual Landscape Gardening Series, a program on “Palms for Southwest Florida – Selection and Care” held on 22 Jan. at the Charlotte Harbor Event and Conference Center. An electronic
survey focusing on freeze damage in the landscape was prepared and sent to 538 residents on our e-mail list.

Results and Discussion

The results of the public outreach communicating landscape freeze damage to the residents of Charlotte County were three-fold. First, a significant increase of hits to our website was recorded—going from 112,411 hits from 1 Jan. to 31 Mar. 2009 to 413,796 hits from the same time last year—showing an increase of 301,385 hits pointed to our prepared response products. This may be attributed to our use of the Pinellas County Extension “Fighting Florida’s Fickle Frost” as well as posted local newspaper articles. Hand-in-hand with this result were additional numbers recorded from the Sun Herald newspaper articles in hard copy from a circulation of 44,028 readers (Audit Bureau of Circulations, 2010) per article with additional electronic forms of the same articles amounting to 25,000 per day (Nickerson, 2010). The Charlotte County Extension website also had a special media release from UF/IFAS, “How to Help Your Lawn Survive the Chill” by Dr. Laurie Trenholm and Dr. Bryan Unruh, that contributed to our website numbers.

Secondly, Charlotte County Extension used group programming to reach our clients. As part of the annual Landscape Gardening Series, a program on “Palms for Southwest Florida—Selection and Care” held on 22 Jan. attracted 117 people. This was an ideal “teachable moment” as many of the questions and focused discussion dealt with first aid for palm freeze damage. Using technology obtained several years ago, the PolyCom® system was a tool that allowed Extension to bring in specialists without the burden of travel expenses in these budget-strained times. Two separate PolyCom® teleconference programs added a new dimension to our group-programming efforts. On 12 Jan., Session III of our Palm Education Program was a question and answer session featuring Dr. Tim Broschat of the Fort Lauderdale Research and Education Center. Twenty-one participants attended the 1-hour session, with many questions directed at post-freeze palm recovery. Our office also took advantage of another PolyCom® opportunity on 8 Mar., “Palms and Cold Weather Damage.” This state teleconference program was planned and implemented by Dr. Tim Broschat and Dr. Monica Elliott.

Focusing on freeze-damaged palms, 16 participants attended the Charlotte County host site.

Thirdly, use of a locally broadcast radio show and plant clinic outreach opportunities with a one-on-one consultation instruction was included. The Charlotte County Master Gardener volunteers host a monthly live gardening call-in show on 1580 WCCF the last Tuesday of each month. They had the opportunity to reach listeners in January, February, and March to address freeze-damaged landscape plants. The average audience at any given time is about 35,000 listeners. In addition, our 10 plant clinics across the county typically record on average a total of over 3,700 clients (office visits and phone calls) per month over the months of January, February, and March.

The results of our electronic survey (SurveyMonkey© 2010) of 538 residents recorded 46.6% receiving moderate damage and 35.2% severe damage. Of the respondents, 52.4% indicated that they used blankets while 40.5% brought their plants indoors. Some success in preventing freeze damage was recorded by 62%, while 26.3% had no success in protecting their plants. A few respondents, 11.7%, actually reported success with their protection efforts. While 74.8% indicated that they did not access information from the Charlotte County Extension Service, 25.2% said that they did. Of those that said that they obtained information from Extension, 48.6% said that a newspaper article was identified as the source. This was followed by 34.7% who used the website, 10.4% from a written publication, and 5.6% from a phone conversation. The results collected indicated that 20.2% of the respondents found the information they received useful, followed by 15.4% very useful, 13% somewhat useful, and 1.6% not useful. For 49.8% of the respondents, this question was not applicable.

Overall, our office reached a good deal of customers with research-based information in reaction to their immediate landscape needs. This is especially notable within our electronic technology tools. Additional work is now needed in having residents adopt more sustainable landscape plantings that will thrive even in fluctuating weather conditions.

Literature Cited

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