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## Partnering with Industry to Deliver Continuing Education to Florida's Licensed Pesticide Applicators

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## Partnering with Industry to Deliver Continuing Education to Florida's Licensed Pesticide Applicators

### Abstract

Partnering with private industry can empower Extension educators to enhance their educational outreach efforts. Since 2011, UF/IFAS has cooperated with the Florida Turfgrass Association in conducting a 1-day statewide Polycom® event for providing continuing education to licensed pesticide applicators employed primarily in the ornamental and turfgrass industries. The annual Great CEU Roundup has become an established event through these cooperative efforts. There continues to be greater acceptance of distance delivery techniques as our audience has become accustomed to such programming.

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## Introduction

Licensed pesticide applicators in Florida are required to earn state-approved continuing education units (CEUs) to keep their licenses current (FDACS, 2013). Applicators have traditionally attended live face-to-face programs offered by the University of Florida (Gettys, Fishel, Haller, & Gilbert, in press) and commodity and trade associations. Resource challenges have increased the need for more efficient means of educational program delivery to Extension audiences. Faced with these challenges, Extension educators have become more creative in efficient information delivery mechanisms to save miles traveled, time, and costs (Cecil & Feltes, 2002). Several distance delivery formats are available, but considerable interest within the University of Florida/IFAS Extension (UF/IFAS) has been with Polycom® and Web-based programming (Vergot, 2004; Ferrell & Fishel, 2007).

Our initial efforts were in 2009 in using Polycom® to deliver pesticide applicator continuing education (Fishel, Ferrell, Vallad, Price, Cherry, Mizell, & Duncan, 2010). Based on audience response from survey data and real need, these distance programs have been offered on a regular basis since. Interest has grown, and audiences as large as 1,000 participants in 50 sites have attended a single-day event (Fishel & Langeland, 2011).

Forming partnerships with private industry can empower Extension professionals to differently

strategize methods of program delivery and effectively and efficiently reach broader audiences (Diemer, Phillips, & Hillon, 2004; Stalder, Miller, Johnson, Boggess, Karriker, & Johnson, 2008). Since 1953, the Florida Turfgrass Association (FTGA) has been an advocate for promoting the turfgrass industry with support for extensive research, continuing education, and opportunities for turfgrass professionals to network with their colleagues. FTGA holds several annual regional and statewide events that also offer CEUs to licensed applicators. Currently in Florida, there are approximately 50,000 applicators who are either licensed or holding certificates to work in some facet of the turfgrass industry (FDACS, 2013). The major objective of our work was to provide an educational opportunity by offering state-approved CEUs to those who work in the turfgrass industry as well as those employed by other agricultural sectors.

## Methodology

The UF/IFAS Pesticide Information Office (PIO) was approached by FTGA in 2010 to plan and host an annual 1-day statewide Polycom® event initiating in 2011. An agreement was reached to share the workload of implementing the event. The PIO would plan the agenda, solicit appropriate speakers and county Extension site hosts, and submit the necessary documentation to FDACS for state approval. The FTGA was responsible for advertising and marketing the event, processing participant registrations, and collecting fees. For marketing purposes, the event was named "The Great CEU Roundup" in an attempt to grasp public attention. Solicitation for host sites and publicizing the event was conducted beginning in March each year, with the program held in mid-July. A preregistration fee structure was set as follows:

- UF/IFAS employees: \$10;
- Public (government agency) employees: \$25; and
- Industry professionals: \$50.

Following completion of the event, county Extension site hosts were reimbursed by FTGA 50% of the remaining preregistration fee monies per attendee minus the cost of providing lunch.

All speaker presentations were delivered using PowerPoint® format from the main UF campus in Gainesville to approximately 20 participating site hosts throughout the state each year. The 6-hour program met state approval for 6 CEUs in a variety of applicator categories.

Participant surveys were distributed to the program attendees at the conclusion of the event, but prior to issuing state-approved CEU attendance verification forms. The survey was designed to not solely collect data regarding knowledge gain, but to also gather information for future planning purposes. The first section of the survey addressed needs assessment (Table 1), while the second section used a 5-point Likert scale (5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree) to ascertain applicator opinion, knowledge gain, and attitude change (Table 2). This article reports selected findings from the July, 2013 event.

## Results and Discussion

The statewide total attendance for the event has ranged from about 200 applicators initially and has grown to approximately 300 applicators from almost half of Florida's counties in 2013. The survey response rates have generally been in the range of 55 to 70%. CEU needs assessment data are shown in Table 1. To keep licenses valid, applicators in Florida have a choice of retaking initial certification exams, earning CEUs, or a combination of the two.

Survey results showed that applicators have an intense preference for attending CEU programs as a means of renewal (93.5%). Coupled with exam anxiety, employment is at stake for many in this audience if licenses are not maintained; therefore, this is not unexpected. An initial survey was conducted in 2004 by Langeland in Florida and showed that 95% of Florida applicators preferred to renew by obtaining CEUs (Langeland, 2004). For most applicators (62.5%), obtaining CEUs in their locales is not difficult as in previous years (Fishel & Langeland, 2011; Langeland, 2004). However, they are still willing to drive moderate distances to attend a program; nearly 50% were willing to drive at least 25 miles. This percentage as well as those who stated they would drive any distance in order to not retake exams (approximately 14%) has been very consistent with previous surveys (Fishel & Langeland, 2011). Relatedly, they don't object to paying modest fees to earn CEUs, and a small percentage is willing to pay any amount to avoid repeating the exam process. Data from this question have assisted us in setting the fee structure for this event.

We have been tracking the adoption of distance delivery technology with the final two questions in this section. In 2010, attendance at a distance event to obtain CEUs was a novel experience for 63% of our audience (Fishel, Ferrell, Vallad, Price, Cherry, Mizell, & Duncan, 2010). This disproportion has narrowed to about 46% during our 2013 effort, showing that these technologies are becoming more acceptable to the pesticide applicator community. Reinforcing this statistic, the final question clearly verifies that the vast majority of applicators would attend a future distance program. Although there remains a significant percentage of this audience to reach through distance education, these data should be encouraging to Extension educators who may have previously been unwilling to adopt the technology.

**Table 1.**

CEU Needs Assessment Data for Pesticide Applicators Attending the 2013 Great CEU Roundup

CEU Element				
<b><sup>1</sup>What is your preferred method of renewing your license?</b>				
Earn CEUs 159 (93.5)	Retake exams 1 (<1)	Combination CEUs + exams 10 (5.8)		
<b><sup>1</sup>How difficult is it for you to obtain CEUs in your area?</b>				
Nearly impossible	Very difficult	Somewhat difficult	Fairly easy	No problem

4 (2.4)	8 (4.7)	51 (30.2)	75 (44.4)	31 (18.3)
<b><sup>1</sup>How far are you willing to travel to attend an event offering CEUs (miles)?</b>				
0 – 10 16 (9.5)	10 – 25 44 (26.2)	25 – 50 65 (38.7)	50 – 100 19 (11.3)	Any distance, as long as I don't have to retake exams  24 (14.3)
<b>How much are you willing to pay per CEU (\$)?</b>				
10 75 (46.6)	20 35 (21.7)	50 23 (14.3)	Any amount, as long as I don't have to retake exams  28 (17.4)	
<b><sup>1</sup>Is this your first attendance at an event that used distance technology to deliver CEUs?</b>				
Yes: 77 (45.6)	No: 92 (54.4)			
<b><sup>1</sup>If yes, would you attend a similar type of event in the future?</b>				
Yes: 101 (99.0)	No: 1 (1.0)			
<sup>1</sup> Number of applicators; (%).				

Most applicators at least agreed that Polycom delivery can be an effective communication method (mean = 4.15) and thought it was an effective method of learning (mean = 4.11). However, and consistent with previous data, this audience did not strongly feel that the Polycom® format was as effective as traditional learning methods (Fishel, Ferrell, Vallad, Price, Cherry, Mizell, & Duncan, 2010). From a positive standpoint and an Extension educator's view, it was reassuring to confirm they were comfortable at such an event (mean = 4.26). Perhaps equally or more important, the participants indicated that they gained knowledge (mean = 4.05), would adopt at least one practice (mean = 4.12), and the information presented would help their job performance (mean = 4.08).

**Table 2.**  
Pesticide Applicator Response to the 2013 Great CEU Roundup

Survey Statement	Response Mean <sup>1</sup>	S <sup>2</sup>	n
I found the format of this event to be an effective method of presenting information.	4.15	.77	179
I found this format to be an effective method of learning.	4.11	.79	177
I found this format to be just as effective for learning as traditional "face-to-face" classes.	3.54	1.07	165
I feel comfortable attending an event using this format.	4.26	.77	165
I gained knowledge by attending today's event	4.05	.81	191
As a result of this training, I plan to adopt at least one practice	4.12	.83	163
My knowledge gained today will help my job performance	4.08	.92	171
<sup>1</sup> Mean was based on a 5-point scale where 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree. <sup>2</sup> Standard deviation.			

## Implications

Partnering with private industry is an efficient means for conducting large-scale educational events because the workload is shared. Private industry partners can also assist Extension in reaching new audiences through their association membership. The Great CEU Roundup has been well received and has become an established event. The use of Polycom® for such events makes program delivery an economically feasible alternative to traditional face-to-face events without sacrificing a substantial amount of effectiveness.

## Acknowledgments

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