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The Landscape Rodeo, Five Years of Training and Fun in St. Lucie County

Edward Skvarch^{*1}, Daniel Culbert², Yvette Goodiel³, Christine Kelly-Begazo⁴, Henry Mayer⁵, and Anita S. Neal¹

¹University of Florida, IFAS, St. Lucie County Extension Service, 8400 Picos Rd., Ste. 101, Ft. Pierce, FL, 34945

²University of Florida, IFAS, Okeechobee County Extension Service, 458 Hwy. 98 N. Okeechobee, FL, 34972

³University of Florida, IFAS, Martin County Extension County Extension Service, 2614 SE Dixie Hwy, Stuart, FL, 34996

> ⁴University of Florida, IFAS, Indian River Extension Service, 1028 20 Pl., Ste. D, Vero Beach, FL, 32960

⁵University of Florida, IFAS, Miami-Dade County Extension Service, 18710 SW 288 Homestead, FL 33030

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Over the past five years educators from the University of Florida, IFAS Extension, have offered a landscape rodeo to green industry professionals along Florida's Treasure Coast. The rodeo was introduced as a mechanism for students to reinforce what they learned in the classroom by providing a venue for hands-on learning. The rodeo is held once a year in January and consists of "education stations" where participants are rotated through each station every 50 minutes. At each rotation, participants are actively engaged in hands-on activities including fertilizer calibration and application, pesticide spill cleanup, safe use of landscape equipment and landscape integrated pest management. University of Florida, IFAS Extension agents and sales and service members from various green industry businesses provided the training and were encouraged to engage all students in learning activities. Following the training, a landscape competition was held with events in calibration and application of fertilizer and safe navigation of an obstacle course with a lawn tractor. The top three winners of each competition were awarded gift cards ranging from twenty-five dollars for third place to one-hundred dollars for first.

A full day Best Management Practices workshop was developed with the premise of providing hands- on activities to complement classroom workshops. Hands-on learning provides learning by doing where students participate individually or in groups and is a very effective means of complementing traditional classroom programming. The underlying assumption of learning by doing is that an activity associated with a career area will be more meaningful and insightful than talking or reading about it in a classroom. Hands-on activities are an important component of teaching because they have a greater impact on learning, retention and stimulate emotions, experiences, and feelings more so than book learning.

Materials & Methods

EDUCATORS. County faculty from University of Florida, IFAS were recruited based on their knowledge of Best Management Practices. When contacting the faculty, it was emphasized that all teaching techniques be based on learning-by-doing and that all field day participants become actively engaged in the learning sessions.

EDUCATION STATIONS. The training field day for all hands-on teaching activities was provided through individual education stations each focusing on a separate Green Industry Best Management Practice. Those practices focused on included: 1) fertilizer calibration and application, 2) integrated pest management, 3) pesticide calibration and application, and 4) equipment safety. Stations were randomly set up both indoors and outdoors and were separated by at least a 50-yard buffer to prevent voice drift interference. At the time of registration participants were organized into separate groups and assigned a beginning station. The groups spent 50 minutes at each station and were rotated with the assistance of a facilitator who kept track of time and directed groups from station to station. While at each station the students calculated fertilizer rates and then applied the calculated amount over a large blue tarp; inspected plants for insect and disease damage; calibrated a 5-gallon back-pack sprayer and then applied the measured amount correctly; dressed in the appropriate pesticide personnel protective equipment as required by the pesticide label provided and activity worked with various landscape equipment learning how to handle each piece safely. Upon completion of the four station rotation, the participants were greeted by a delicious catered lunch at the cost of \$10.00 per head.

^{*}Corresponding author. Phone: 772-462-1660; email: eask@ufl.edu

LANDSCAPE RODEO: Following lunch anyone who attended the event were invited to sign up to participate in a landscape rodeo. The rodeo consisted of two events: a lawn tractor obstacle course and a fertilizer calculation/calibration exercise.

For the lawn tractor competition, contestants were provided with a zero turn lawn tractor and instructed that safety was the upmost concern; if the mower was operated in an unsafe manner, the contestant was immediately disqualified. Buckets were positioned on the center and edges of the course, and filled with water to easily detect if they were scraped. If the wheels of the mower or the deck touched or upset the bucket, or if the mower deck or tires touched the boundary line, penalty time was added to the time it took each contestant to complete the course. The total time calculated was the elapsed time to complete the course plus the sum of penalties. Penalty points were assessed at 30 seconds for each infraction including driving over the boundary line, not wearing a seat belt, and not parking within 6 inches of a parking cone placed at the end of the course. Additional time was added for scraping a bucket (100 seconds) and completely knocking the bucket over (300 seconds).

With the fertilizer competition a 1000 ft² area was marked off. Contestants were then handed a 15–0–15 fertilizer label and asked to calculate the amount of total fertilizer needed to apply 1 lb N/1000 ft² (one pound of nitrogen per 1000 square feet). They were also asked to properly calibrate the spreader to correctly apply fertilizer. Contestants were awarded 50 points for correctly calculating the amount of fertilizer needed, 25 points for appropriate setting on spreader, and 25 points for uniformity of fertilizer application. Contestants were awarded prizes in both events consisting of a \$50.00 gift certificate for first place, and a \$25.00 gift certificate for both second and third place.

Results and Discussion

Over the five-year period a total of 364 landscape workers attended the field days. Sixty days following each field day participants were sent a 10-question survey. The survey measured how many of the participants had previously attended Green Industry Best Management Practices Workshops, and did participants change their landscape behaviors as a result of the field day. Of the 250 surveys sent, 67 responded (Figs. 1–7).



Fig. 1. Total attendance over a 5-year period.

Results Attended a GI-BMP training prior to the Landscape Rodeo



Fig. 2. Did you attend a classroom Green Industries Best Management workshop prior to the January field day?



Fig. 3. If you attended a Green Industry Best Management Practices Landscape workshop prior to the field day did the hands-on activities help to reinforce concepts that were presented in the classroom?



Fig. 4. I learn more by doing an activity associated with my job rather than talking or reading about it in a classroom?



Fig. 5. I have incorporated concepts from the Green Industry Best Management field day into my everyday job routine.



Fig. 6. Which activities?



Fig. 7. Before/after participating in the Green Industry Best Management Practices Landscape Field.

From the 67 responses, 27 attended classroom Green Industry Best Management Practices programming prior to participating in the landscape field day. Of the 27 respondents 25 either agreed or strongly agreed that the field day effectively reinforced concepts that were presented in the classroom. When asked if they learn more by doing an activity associated with their job, rather than talking or reading about it in a classroom, 66 respondents indicated they either agreed or strongly agreed. When questioned if concepts from the field day were incorporated into their everyday job routine, 66 answered yes. In a followup question of which activities were included, 25 participants indicated fertilizer calibration, 13 integrated pest management, 51 equipment safety, 13 reading a label, and 11 indicated no activities. When questioned how many utilized at least one Best Management Practices before the field day 39 respondents indicated they did. When questioned how many as a result of the training now incorporate at least one Best Management Practice 67 indicated that they did.

A hands-on approach is an excellent complement to classroom training. Through the use of the "Education Stations" participants became and remained engaged and overwhelmingly admitted that they learn best by doing an activity. Participants also indicated that as a result of the hands-on training they are now more confident with Green Industries Best Management Practices and therefore more likely to incorporate them into their daily landscape routines. The landscape rodeo was an excellent means to gauge true program involvement and knowledge gained while providing a fun approach to learning.

The landscape rodeo provided an opportunity for the participants to compete against their peers and showcase their knowledge. Many of the participants commented that this provided additional incentives to compete. One of the St. Lucie County parks and recreation supervisors indicated the rodeo was an excellent way to teach while also creating a sense of healthy competition among the staff.

Comments from some of the participants indicated that a handson approach helped participants to better understand the concepts and that field day was a fun way to learn. Administration was also excited about the field day, indicated by a follow up conversation with a St. Lucie County Parks and Recreation manager who stated that he had noticed a greater sense of comradery among the staff among his staff as a result of the competition. An athletic field superintendent stated that it was well worth the time having his staff attend the field day and that they now are incorporating what they learned into their landscape working routines.