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## **Serving Green Industry Stakeholders through Statewide Education Days: In-person Engagement for Regional Needs**

### **Abstract**

In-person education provides a targeted approach that can be curated to meet the various needs of stakeholders throughout a state, where the LSU AgCenter and the Louisiana Nursery and Landscape Association have developed the “Landscape Professional Education Day” series to stimulate statewide engagement among green industry stakeholders. Since 2022, nine events have been held throughout the state, serving over 300 stakeholders spanning various regions. This article examines survey data collected from events, highlighting attendee feedback and programmatic impact of events. Insights garnered from program development and feedback may provide guidance in developing similar statewide extension efforts predicated on industry partnership.

**Abbreviations:** LNLA = Louisiana Nursery and Landscape Association; LDAF = Louisiana Department of Agriculture and Forestry

**Keywords:** Louisiana, landscape, nursery, extension, ornamentals, stakeholders, in-person

## Introduction

The green industry represents landscape, nursery, and allied trade professionals. In Louisiana, a horticulture license is required to perform work throughout the state; however, regionally relevant challenges and opportunities remain. Louisiana includes hardiness zones 8b through 10b (USDA 2023), spanning the rural regions of the state, expanding suburban areas, and the unique urban conditions of cities like New Orleans and Baton Rouge. Indeed, plant recommendations, management practices, regulations, and industry challenges/opportunities span a wide spectrum throughout the state. To effectively serve stakeholders throughout the entire state, the Louisiana Nursery and Landscape Association (LNLA) encouraged the development of the “Landscape Professional Education Day” series. This program, developed by the Louisiana State University Agricultural Center (AgCenter), involves in-person, day-long education events held on a rotating basis throughout the state. This program is predicated on providing in-person education that is carefully curated to meet the needs of the host-region.

While online communications and meetings have advanced since COVID, in-person extension education provides a valuable resource that may be more accessible for certain audiences. Studies comparing in-person and virtual education methods reflect key considerations for program development and effective knowledge transfer. Pretest and posttest evaluations serve to quantify knowledge gained, and data from a study by Gross et al. (2023) indicated that while virtual viewers showed significant increases in knowledge gained, the gross increase in knowledge gained was less than in-person education.

Virtual or in-person events exhibit a spectrum of attendee opinions, where Satake et al. (2024) observed that individuals with prior experience with virtual meetings exhibit a higher degree of comfort with online resources. Of the respondents with prior virtual meeting experience, 77.6% felt that online events are “easier to participate in” and 85.9% found them more economical; however, 90.6% claimed that in-person events are “easier to build friendships,” and to “have fun,” at. A study assessing “positive affect”

and “social connection” across a multitude of virtual delivery methods vs. in-person methods for meetings (Liang et al. 2024) reflected similar sentiments. In their study, each method (virtual vs. in-person) has strengths and weaknesses, notably affected by what is included in online correspondence (online voice calls and messaging provided more benefit than social media posting and commenting), but that face-to-face meetings scored higher with regards to positive affect and social connection. The utility of virtual versus in-person education varies between groups of students, where Photopoulos et al. (2023) reported that undergraduate student virtual learning concerns include “zoom fatigue” and reduced peer interaction and missed networking opportunities; however, this was more common in first-year students than more senior students who ostensibly may have developed those connections already.

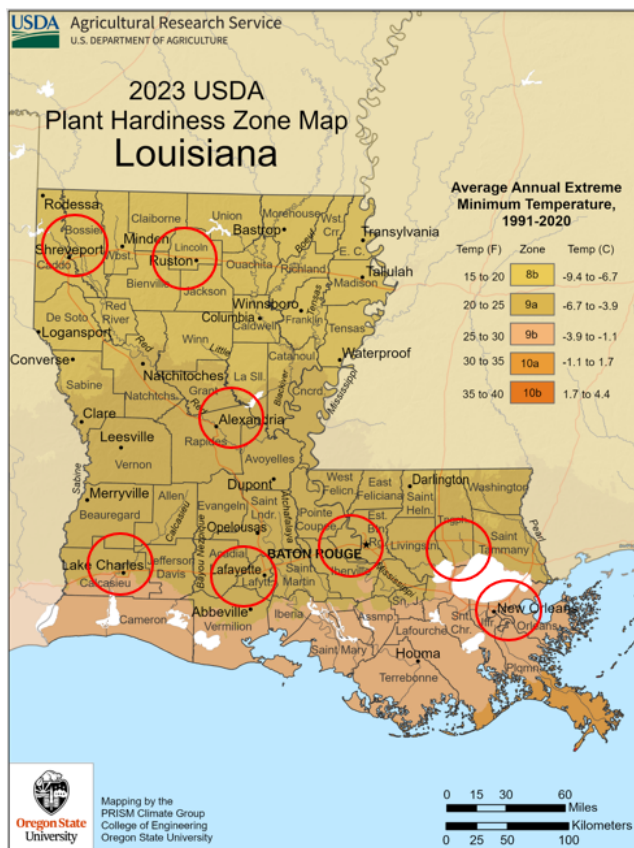


Figure 1: 2023 USDA Hardiness Zone Map of Louisiana with Landscape Professional Education Day locations circled.

While evidence indicates value in both virtual and in-person learning, the specific needs of stakeholders in different areas of the state (both in terms of education content and digital access) spurred the development of this educational program. Furthermore, networking for both current and prospective stakeholders, as well as new and seasoned extension specialists, were programmatic goals. This article examines quantitative learning assessments for attendees at different “Landscape Professional Education Day” workshops, as well as qualitative feedback that provides valuable insights towards stakeholder needs, topics of interest, and opportunities for improvement.

## **Materials and Methods**

### **Project Overview**

Event locations were chosen based on LNLA member correspondence, seeking to select areas that were previously underrepresented in membership, events, and training opportunities for horticulture licensing and related certifications. Event dates were selected based on regional insights, recognizing times of year that are most amenable to audience members. This typically included late winter (January and February, before spring season work increases) and fall (right before or after major installation windows). Events were scheduled semi-annually. Coordination with local extension agents, faculty members, and stakeholder representatives secured venues and sponsorships to facilitate a free event for local stakeholders to attend. Continuing education credits for Landscape Architects were made available for those attending. While many attendees had possession of or interest in pesticide or irrigation licenses, the nature of these educational events sought to provide a broad-spectrum educational experience that encompassed many areas, rather than focusing on curriculum for just pesticide or irrigation certifications/recertifications.

### **Curated Content**

Discussions with host-site stakeholders and local extension agents yielded insights towards topics of regional interest, green industry segment (landscape or nursery

production), and speakers. Speakers largely included faculty members with statewide extension responsibilities, offering an opportunity for new and seasoned specialists to meet/reconnect with stakeholders and extension agents in the host-site area. Speakers also included LNLA board members, industry members and suppliers, and regulatory representatives. This event sought to provide a mix of speakers, topics, and educational resources (both applied horticulture information and general business information included). For example, plant material presentations focused on species selection and management considerations for the host-site hardiness zone, and regionally relevant pests (insects, weeds, and diseases) were the subject of presentations. Events welcomed regulatory officials who were able to provide information and updates on Louisiana Department of Agriculture and Forestry (LDAF) regulations directly to local stakeholders. Local material suppliers and equipment dealers were connected with stakeholders, who often sponsored meals and giveaways for events.

### **Feedback and Evaluations**

Attendee and industry feedback was requested at events. A printed, end-of-event survey for participants captured quantitative and qualitative feedback, designed to highlight what topics were most appreciated and what topics of interest should be added in the future. Survey format sought to assess whether knowledge was gained, using simple, specific questions such as, “did you gain knowledge that would directly benefit your business,” and qualitative feedback in the form of open-ended answers to “what was your favorite and least favorite part of the day”. There was no single, standard format for evaluations, with some events emphasizing qualitative feedback over quantitative feedback. A survey example is included in the supplementary files.

### **Results and Discussion**

Nine events have been held to date (January 2022 through February 2026) in eight different locations in Louisiana.

Table 1: Location, date, and total participants (attendees, speakers, and support staff) for each event.

<b>Event #:</b>	<b>Location (Louisiana)</b>	<b>Date</b>	<b>Total Participant Range</b>
1	Lafayette	January 11 <sup>th</sup> , 2022	(35-45)
2	Ruston	October 6 <sup>th</sup> , 2022	(35-40)
3	Lake Charles	February 1 <sup>st</sup> , 2023	(30-40)
4	New Orleans	September 12 <sup>th</sup> , 2023	(70-90)
5	Baton Rouge	March 1 <sup>st</sup> , 2024	(50-60)
6	Shreveport/Bossier City	October 10 <sup>th</sup> , 2024	(25-35)
7	Hammond	February 27 <sup>th</sup> , 2025	(35-45)
8	Alexandria/Forest Hill	October 2 <sup>nd</sup> , 2025	(20-30)
9	Lake Charles	February 5 <sup>th</sup> , 2026	(20-30)

## **Results**

### **Quantitative Survey Results**

Survey data was collected from events #2, 3, 4, 6, and 8. Survey responses indicated that 98.8% of attendees reported they *gained knowledge that directly benefited them or their business*. This was determined through a simple yes or no question: “Do you feel that you will benefit from the information learned today?”.

Table 2: Survey responses to the question: “Do you feel that you will benefit from the information learned today?”

<b>Event #:</b>	<b>Surveys Received:</b>	<b>(#Yes/#No)</b>
2 (Ruston)	4	(4/0)
3 (Lake Charles)	16	(16/0)
4 (New Orleans)	38	(37/1)
6 (Shreveport/Bossier City)	7	(7/0)
8 (Alexandria/Forest Hill)	17	(17/0)
Total	82	(81/1) = 98.8% responded “yes”

Individual talks were evaluated quantitatively and qualitatively by attendees, indicating areas of interest and requests for follow-up materials. Generally, topics consistently scored between 4 and 5 (on a scale of 1-5 with 1 being worst and 5 being best); however, qualitative input provided more nuanced assessments.

### **Event Synopsis Examples**

Event locations catered to different clientele, representing a wide range of environments, businesses, attitudes, and professionals. This article will further describe three representative events, one in an urban area (New Orleans) and two in more suburban/rural areas (Bossier City/Shreveport; Alexandria/Forest Hill). While this is not an exhaustive representation of the different events and/or clientele, it serves as a foundation for discussing the variability within and between events.

## **Urban Event: *New Orleans***

The most attended event was held in the auditorium at Lafreniere Park in Metairie, LA, providing the capacity needed for registrants. This served the greater New Orleans area, drawing a diverse crowd of largely landscape contractors, designers, and public/private sector urban horticulturists. Topics included landscaping in small areas, contaminated soil management (primarily focusing on lead, a locally relevant issue), and biological pest control. Sustainable practices for urban landscapes, representing a variety of practices that provide unique solutions to urban challenges, included emphasis on business management and turfgrass selection. Green infrastructure plant material was discussed, where insights from a green industry stakeholder were shared in a presentation demonstrating tangible installation examples throughout the city. Qualitative assessments from evaluations included the following insights:

Attendees expressed strong interest in multiple topics, varying from attendee to attendee. All speakers scored highly, averaging scores between 4 and 5; however, strong interest in emerging topics such as biocontrol reflected willingness to implement non-chemical management options and often aligned with interests in native plants and comments that indicated turfgrass was not of interest to them personally, but that the content was well-made. Alternatively, public sector employees valued insights into topics such as turf, managing existing disease issues, and practical tips to incorporate into their current operating procedures. Landscape architects particularly appreciated perspectives that had to do with design principles and plant materials specifically for urban conditions. Overall, this event drew the largest crowd and presented the most diverse interests of attendees. All attendees indicated strong interest in multiple topics, varying between individuals but validating the content quality; similarly, the entire day as a whole was lauded by participants. Opportunities for improvement include having larger or multiple screens for presentations, handouts for attendees to follow along with presentations, and challenges with large capacity crowds that may include the (sometimes low) volume of speakers versus competing with noise from audience members around them. Perhaps the best indication of various attendee attitudes was

the difference of opinion in presentation pacing; some attendees felt that the presentation lengths were “too long”, “too concise”, or “just right”. Participants cited networking with other attendees as a positive aspect of this event.

New Orleans Evaluations		
Topic:	Average Score (1= lowest, 5 = highest)	Standard Error of Average Score
Overall Event	4.78	0.07
Landscaping Small Spaces	4.53	0.12
Landscape Diseases	4.68	0.10
Biological Pest Control	4.57	0.10
Sustainable Plant Material	4.54	0.12
Turfgrass and Turf Weeds	4.19	0.16
Contaminated Soils	4.83	0.07
Sustainable Landscaping	4.64	0.14
Overall Instructor Rating	4.72	0.09

**Suburban/Rural Events: *Bossier City/Shreveport, Alexandria/Forest Hill***

Events in north and central Louisiana were held in smaller, more intimate locations to better accommodate attendees. This provided more direct conversation among the typically 25-35 individuals present, which was appreciated by some attendees. However, other attendees stated that more people would benefit from these events, lamenting lack of participation on other’s behalf. Attendees remarked that the opportunity to speak with LDAF officials about relevant regulations and licenses cleared

confusion for them. Similarly to the New Orleans event, these events reflected variation between attendees' opinions on topics. Both events involved a greater proportion of nursery growers and landscapers who valued direct management recommendations that often include chemical use.

The smaller, more intimate crowds and venues provided more opportunities for passive conversation to take place between presentations, including expanded Q&A sessions and more opportunities for attendees to weigh in with their thoughts and get direct assistance. Many attendees at these events (and other events such as the one in Ruston, another north LA location) stated their appreciation for educational resources being brought to (and curated for) them. Similarly, events held in different areas of the state provided an opportunity for new and existing specialists to visit with stakeholders in different regions. This facilitated engagement with a greater array of industry members, serving them through presentations and also learning from their insights, challenges, and opportunities that they face in their area.

Alexandria/Forest Hill Evaluations		
Topic:	Average Score (1= lowest, 5 = highest)	Standard Error of Average Score
Overall Event	4.82	0.10
Sustainable Landscaping	4.69	0.12
Weed Management	4.76	0.14
Plant Varieties	4.71	0.11
Diseases in the Landscape	4.82	0.10
Turfgrass	4.59	0.15
Water Quality	4.59	0.12
Overall Instructor Rating	4.94	0.06

## **Key Themes from all Events**

Networking: Attendees found immense value in meeting and engaging with peers, often connecting with individuals or businesses with whom they can source materials or subcontract with. The friendly atmosphere made a positive impression upon attendees, with ubiquitous interest in attending future events.

-The diversity of presentations ensured that everyone had something of interest; however, this also reflected variations in what people care least (or dislike most) about, such as turfgrass, chemical use, and/or pacing/presentation style. By incorporating information that caters to current, common practices in the landscape (turf, pesticides, etc.), as well as novel or emerging trends in the green industry (biocontrol, unique designs and plant material), attendees gain the information to sustain current operations as well as develop new concepts to implement in their business.

-Regional Focus: A wide range of topics (and not a singularly focused subject) provides a spectrum of information. Topics were curated based on regional insights and needs which were appreciated by attendees. This is particularly important when engaging with large audiences, as personal preference and interests may vary drastically among the crowd. While not all topics applied to everyone's tastes, there were at least several topics for each individual that piqued interest and reflected local challenges.

-Direct Answers on Regulatory Questions: Practical needs include regulatory updates and questions on appropriate licensure. Inviting regulatory officials who can provide direct information to stakeholders can remove ambiguity and barriers to information.

-Locally-focused Partnerships: Engaging with industry members and extension agents of the host-region to organize and coordinate these events facilitates strong outreach. Individuals with existing ties to the area can leverage their network for advertising and sponsorship purposes, and yield insights to what people want to know.

-Qualitative survey questions provide useful information that quantitative based questions may fail to capture. A primary example of this would be topics that are presented well (i.e. good information, clear dissemination) but are not of interest to the evaluator may be scored lower. This level of nuance is important in developing programming that is effective, even if it doesn't appeal to the attendee.

### **Limitations and Opportunities**

-Some participants requested printout/digital copies of presentations. Bearing this in mind, presentations may be formatted to better fit printed materials (i.e. less animations or overlapping items). Alternatively, coordinating with speakers to develop short, supplemental materials that capture main points in a user-friendly format (digital or print) could provide this information without affecting the in-person presentation style(s).

-Registration for free events may differ from actual attendance in both directions (more attendees than expected, or attendees registering and not attending). While the intention is to make events such as these free (to attendees), a small registration fee may encourage attendees to stay the entire day and/or prioritize attending the event since they paid for it.

-Some attendees were only able to attend part of the day, leaving before they had the opportunity to submit evaluations. Printed evaluation surveys handed out at the beginning of the event may encourage feedback submission, rather than waiting until the end of the event. Integrating digital feedback measures at the conclusion of each presentation may also provide a way to get instant reactions and thoughts for each topic.

- While each event had similarities in scope, style, and structure, a more standardized evaluation form could be used to collect data to make direct comparisons between different events. Evaluation forms often had double-sided printouts, with some attendees neglecting to fill out complete information and/or choosing not to answer questions they were not interested in or did not find relevant to them. Providing explicit

guidance on evaluation forms, reducing the length of the evaluation, and encouraging completion (even for topics that were not of interest) would be useful in data collection.

- Consistency in survey format, delivery, and collection would provide more useful, quantitative data to support evaluation efforts. Neglecting to capture formal survey data for some of the events represents an opportunity for improvement in program coordination. Within this program/article (to date), thorough evaluations were only collected for events #2, 3, 4, 6, and 8.

-Advantages of online meetings include elimination of travel time, fuel costs, and/or lodging. For seasoned speakers, the time savings may be more important to them than the potentially missed networking opportunities; however, newer faculty and personnel may derive more benefit from gaining face-to-face interaction with stakeholders/clientele, especially those with statewide responsibilities.

## **Conclusions**

In-person extension resources maintain a unique value to stakeholders through facilitating networking and providing presentations optimized for their issues. Attendees reported overwhelming appreciation for having in-person events held within their own region, especially with topics that were relevant to their needs. In-person formatting can create a casual atmosphere, one where attendees may feel more comfortable asking questions face-to-face. The Landscape Professional Education Day series represents a framework for creating an adaptable educational resource that caters to green industry stakeholders, utilizing a template that builds upon traditional hallmarks of the land-grant extension mission. Partnerships with industry leaders and local extension personnel create a community atmosphere, encourages attendance, and secures venues and sponsorships (i.e. lunch, giveaways, etc.) offsetting costs of programming and allowing the event to be free for attendees. Evaluations from events can be used to plan future events by collecting data on audience characteristics (i.e. sector of green industry) and contact information and informing the direction of future topics. Including quantitative and qualitative assessments offer unique insights into program impact, providing space

for attendees to elaborate and provide more nuanced feedback. With the diversity of opinions on topics, using both methods can assist in better understanding audience feedback metrics.

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### **Conflicts of Interest**

The authors have no conflicts of interest to declare.

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**Appendix**

Example Evaluation Sheet:

**Alexandria / Forest Hill Landscape Professional Education Day**

**October 2nd, 2025**

Thank you very much for participating in our Landscape Professional Education Day sponsored by the LNLA!

Please mark your evaluations for all applicable fields. 1 is the worst, 5 being the best. We appreciate your feedback, which helps us provide good information in the future.

**How would you rate the day overall? .....1.....2.....3.....4.....5**

Please rate the following sessions. Feel free to include comments.

Sustainable Landscaping 1.....2.....3.....4.....5 \_\_\_\_\_

Weed Management 1.....2.....3.....4.....5 \_\_\_\_\_

Plant Varieties 1.....2.....3.....4.....5 \_\_\_\_\_

Diseases in the Landscape 1.....2.....3.....4.....5  
\_\_\_\_\_

Turfgrass 1.....2.....3.....4.....5 \_\_\_\_\_

Pest Management 1.....2.....3.....4.....5 \_\_\_\_\_

Water Quality 1.....2.....3.....4.....5 \_\_\_\_\_

Overall Instructor rating 1.....2.....3.....4.....5 \_\_\_\_\_

Do you feel that you will benefit from the information learned today? Yes \_\_\_ No\_\_\_\_\_

Was there anything specific you learned today that you would use in the future?

What was your favorite part of the day (write as many as you want)?

What was your least favorite part of the day (write as many as you want)?

Would you be interested in attending more Landscape workshops? Y\_\_\_\_\_ N\_\_\_\_\_

Would you like to provide any other suggestions to improve in the future?

Survey:

**Company Information:**

Name:

Location:

Email/Website:

Please circle/check all services that apply to your business (for other services, write in your own words):

Residential	Commercial	Design/Build	Maintenance
Pest Management	Irrigation	Lawncare	Trees/Shrubs
Hardscape	Grower		

General Notes/Comments: