University of Nevada Cooperative Extension

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Northern Nevada Green Industry Needs Assessment

Leslie Allen, Commercial Horticulture Program Coordinator

In 2008, University of Nevada Cooperative Extension (UNCE) conducted a green industry Needs Assessment. Three hundred seventy-seven landscaping, retail garden center and horticulture professionals were invited to participate. The results from the needs assessment help us develop programs that will have real impact in our community.

Methods

On May 14, 2007, a focus group of commercial landscape employees was asked to identify emerging needs of the green industry. Group members were also asked to identify the methods with which UNCE could address those needs. There were four general needs: Information and Resources; Diagnostic Lab Services; Recycling and Sustainability; and Training and Programs.

A modified Delphi technique was used to conduct the needs assessment. The needs assessment was mailed directly and provided online using a Web-based survey company. Those recruited via direct mail had the option of completing the printed survey or completing the survey online. Postage-paid envelopes were provided with the mail survey. The data from the paper survey was manually entered into the Internet survey Web site. In addition, for those for whom we had an e-mail address, an electronic copy of the invitation was sent with an active link to the online survey. All participants were asked the identical suite of questions.

Participants were asked to independently rate 22 needs from one to nine, with “one” being the least important and “nine” being the most important. The average importance value for each need was independently calculated and then ranked. This allowed us to identify the needs with the highest average importance values.

The average importance value for the four general needs – Information and Resource, Diagnostic Lab Services, Recycling and Sustainability, and Training and Programs – was also calculated and ranked. By analyzing the average importance value of these categories, we were able to identify important categorical needs which we would not be able to identify by looking solely at specific individual needs.

We identified the highest specific individual need within each of the four categories. This allowed us to determine which needs were most important in each category. This analysis gave us a different ranking than looking at all of the needs separately, and allowed flexibility in building effective green industry programming.

We looked at the number of people who rated each specific need as “nine,” or most important, and “one” or least important. This provided us with a measure of importance that was different than the

average value, encompassing not only the importance of the need, but also the size of the green industry population affected by this need.

Results

The response rate for the survey was 22 percent (n=83). The majority of the respondents, 43 percent, were green industry business owners (Figure 1). None of the respondents were entry-level employees.

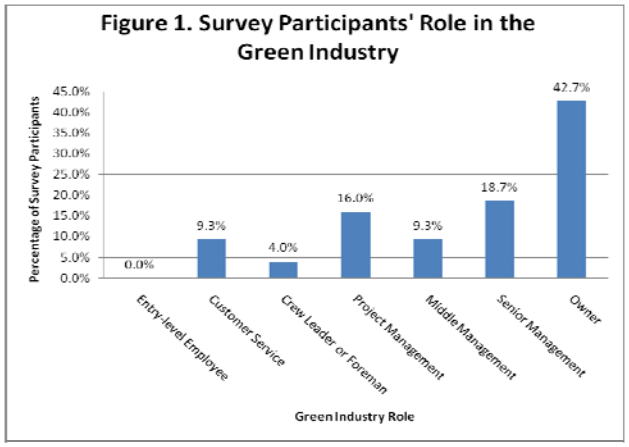

Figure 1. The majority of respondents were business owners. Entry-level employees were not represented in the survey.

Over half of the respondents, 58 percent, have a professional industry certification, with Nursery Worker Training the most widely held certification (Figure 2).

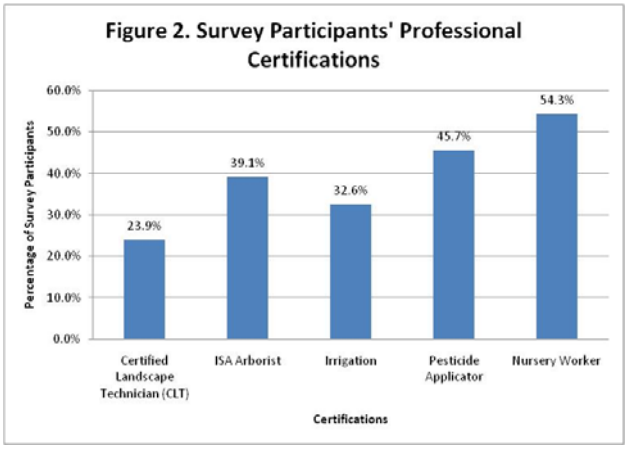

Figure 2. The majority of the survey participants have a professional industry certification. Twenty eight percent are UNCE Certified Nursery Workers.

Sixty-three percent of survey respondents had participated in UNCE programs. Coffee With Friends was the most commonly attended program (Figure 3).

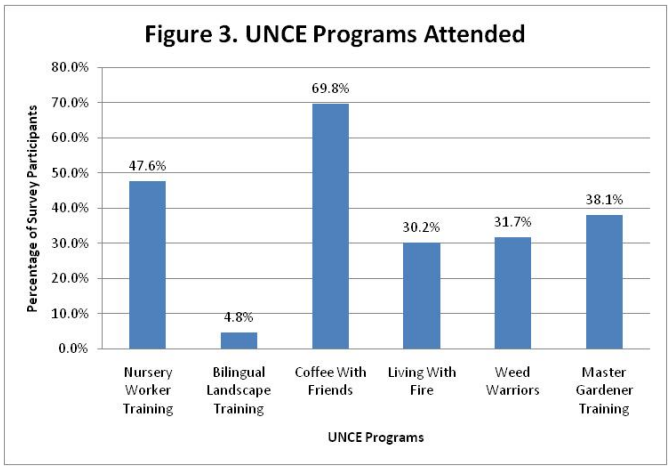

Figure 3. Nearly two-thirds of the respondents participated in a UNCE program. One-third have attended Coffee With Friends.

The general need rated most important by participants was Diagnostic Lab Services, followed by Information and Resources, Training and Programs, and Recycling and Sustainability (Figure 4).

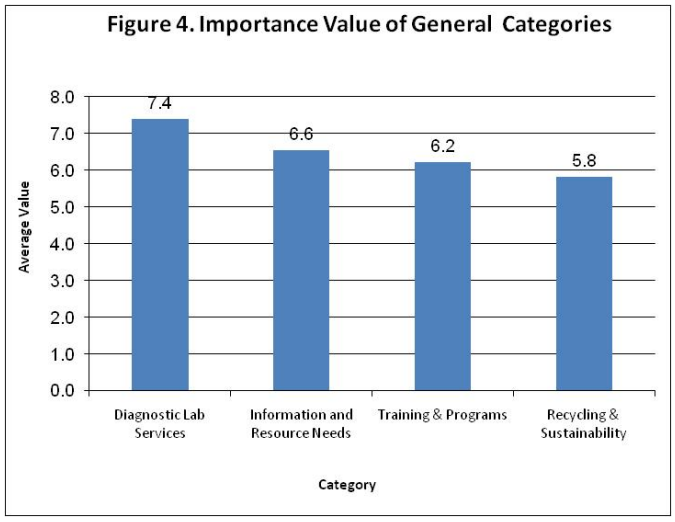

Figure 4. UNCE's Diagnostic Lab Services are very important to the respondents.

More education and training on irrigation practices in the high desert scored highest, even though Training and Programs was the third-highest-scoring general category (Table 1). The high importance value placed on increased irrigation

education and training corresponds with the high value placed on drought planning in the 2003 Horticulture Needs Assessment. Concerns regarding water quantity and use are especially important to Nevada, the driest state in the nation with escalating water costs.

The highest-scoring specific needs, irrespective of general categories, are listed in Table 2. The need rated most important was, again, more education and training on irrigation practices in the high desert. Resuming soil testing was the second-highest-scoring need.

Identifying the lowest-scoring needs helps us to fine-tune our programs and devote resources to programs that are truly our community. The three needs that were rated the least important are listed in Table 3.

Table 1. Most Important Need in Each Category

Category Rank	Category	Need	Average Importance Value
3	Training & Programs	Provide more education and training on irrigation practices in the high desert	7.45
1	Diagnostic Lab Services	Resume soil testing and analysis	7.42
2	Information & Resource Needs	Provide a monthly report of diseases, insects and other emerging horticulture issues	6.91
4	Recycling & Sustainability	Develop a green waste education program	6.58

Table 1. Green industry professionals place a high value on continuing education and training on irrigation practices.

Table 2. Top 10 Highest Scoring Needs

Rank	Need	Average Importance Value
1	Provide more education and training on irrigation practices in the high desert	7.45
2	Resume soil testing and analysis	7.42
3	Provide regionally specific information on invasive weeds and insects	7.34
4	Provide easily accessible education and training programs for consumers on local horticulture practices	7.01
5	Provide educational programs directed at the public regarding proper lawn and tree care	6.92
6	Provide a monthly report of diseases, insects and other emerging horticulture issues	6.91
6	Provide one central, easily accessible source for horticulture information	6.91
7	Provide information about irrigation scheduling that is specific to soil types and plant types	6.84
8	Provide Web-based information on local horticulture topics	6.83
9	Provide landscape maintenance classes (specifically IPM and turf care) to small landscape maintenance businesses	6.63

Table 2. Continuing education and training in irrigation practices was the most important need of the respondents. Easily accessible and Web-based training opportunities were also important.

Table 4 shows specific needs that received the highest number of “most important” ratings by survey participants. This is distinct from the other ratings, as this is not the average score, but rather the number of participants who feel that a specific

need is a “most important” issue, scoring it a “nine.” For example, resuming soil testing was scored “nine” by 43.4 percent of participants.

Table 3. The Three Least Important Needs

Rank	Need	Number of Participants Scoring Need as 1 (Least Important)	% of Participants Scoring Need as Least Important
1	Provide more Spanish-language information and training	16	20.0
2	Help identify a use for soil that homeowners no longer want or need	15	18.3
3	Provide research-based information on water gardens and ponds	14	16.7

Table 3. Analyzing the least-important needs provides clarity regarding future program development.

Discussion

Based upon its average importance value of 7.42, and its rating as a “most important” need by 43.4 percent of the survey participants, resuming soil testing is the top green industry priority.

University of Nevada Cooperative Extension horticulture department is developing an action plan to address this need. This plan will be a collaborative effort among the UNCE horticulture team, County Cooperative Extension educators and area specialists. The team will determine which soil tests are most valuable to our clients and which soil-testing procedures to make available.

Providing more education on irrigation practices in the high desert was the highest-scoring need based on average importance value, but was scored as a “most important” need by only 29.8 percent of the survey participants. This can be interpreted to mean that irrigation training is important to many of the survey participants, but is not regarded as a “most important” need. Efficient water use and water conservation are important issues in Nevada, and programs to address these issues will be explored by the horticulture team and appropriate community partners.

Providing regionally specific information on invasive weeds and insects was the third-highest-scoring specific need based on average importance value, and was a “most important” need to 34.9 percent of the survey participants. UNCE periodically offers Weed Warriors, a two-day intensive weed workshop. Additional programs will be developed as time permits to meet the demand for invasive weed education.

UNCE currently does not offer a specific insect education program to address the demonstrated need for regionally specific information on insects. However, the Nevada Department of Agriculture state entomologist regularly presents insect updates at the UNCE-sponsored Coffee With Friends workshops. Additionally, The National Plant Diagnostic Network First Detector training is now offered annually in Cooperative Extension offices. This program is free and educates participants about emerging diseases and insect threats and protocols for monitoring them and submitting samples.

Increasing the amount of programming provided in Spanish scored low in the assessment, but our existing training and materials are very popular. Twenty percent of survey participants rated providing more Spanish-language information and training as a “least important” need. This need also received a low rating based on average importance value. Possible interpretations for this result are that this need is adequately met by current UNCE programming, or that the survey participants did not include Spanish-language speakers.

Table 4. Top 10 Most Important Needs to the Greatest Number of Participants

Rank	Need	% of Participants Scoring Need as Most Important
1	Resume soil testing and analysis	43.4
2	Provide regionally specific information on invasive weeds and insects	34.9
3	Provide a monthly report of diseases, insects and other emerging horticulture issues	33.3
4	Help develop a low-cost green waste site and reclamation area for industry use	32.5
5	Provide more education and training on irrigation practices in the high desert	29.8
6	Provide educational programs directed at the public regarding proper lawn and tree care	28.6
7	Provide information about irrigation scheduling that is specific to soil types and plant types	25.3
7	Provide Web-based information on local horticulture topics	25.3
8	Provide easily accessible education and training programs for consumers on local horticulture practices	24.1
8	Provide one central, easily accessible source for horticulture information	24.1

Table 4. Almost half of the respondents thought resuming soil testing and analysis was the most important need of the green industry. Web-based education was the most important need to about one-quarter of the participants.

Conclusion

Cooperative Extension relies on needs assessments to measure the need for existing programs and guide the development of new ones.

This needs assessment has provided valuable feedback regarding the value of current UNCE programs and will be vital in developing future programs.

References

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