

Landscape & Grounds Maintenance Short Course Evaluation, 2013

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**Survey Research Center Report 2013/9
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Executive Summary

This study was developed to evaluate the outcomes of the 2013 Landscape and Grounds Short Course sponsored by the University of Wisconsin-Extension in three southeast Wisconsin locations.

Participants in the short course sessions were asked to complete a short questionnaire to rate their knowledge on each topic before the short course and after the short course. Answer choices were Poor, Fair, Good, and Excellent.

At the end of their last session attended, registrants were given a separate questionnaire to provide overall feedback on the short course.

A total of 601 weekly session questionnaires were completed by participants. The distribution by location is as follows: 237 from Waukesha, 180 from Sheboygan, and 184 from Bristol. A total of 129 overall feedback questionnaires were completed.

Respondents consistently reported substantial increases in their knowledge levels after the short course compared to their knowledge prior to the course. When measured across all sessions and topics, the percentage of respondents who rated their pre-session knowledge as good rose from 29 percent to 57 percent afterward. The percentage of respondents who rated their knowledge level as excellent increased from 5 percent to 29 percent.

The short course will have a substantial multiplier effect in the green industry. Nearly all respondents said they would share the course information with other horticulturalists/co-workers. 80 percent said they would share the information with at least two others, while nearly 20 percent plan to share the course information with six or more individuals in the industry.

Respondents reported a high degree of satisfaction with the short course, with 95 percent of participants saying they are likely to attend future horticultural workshops offered by UW-Extension. In addition, four in five participants said the value of this short course was higher or much higher than offerings by other providers.

Survey Purpose

This survey was developed to evaluate the outcomes of the 2013 Landscape and Grounds Maintenance Short Course sponsored by the University of Wisconsin-Extension in southeast Wisconsin. The short course contained four sessions and was offered in February and March at three locations: Waukesha, Bristol, and Sheboygan.

Site coordinators were as follows:

Bristol: Barbara Larson, Kenosha County Horticulture Educator
Patti Nagai, Racine County Horticulture Educator

Waukesha: Kristin Krokowski, Waukesha County Commercial Horticulture Educator

Sheboygan: Michael Ballweg, Sheboygan County Crops & Soils Agriculture Educator

The completed questionnaires were sent to the Survey Research Center (SRC) at the University of Wisconsin-River Falls for tabulation and analysis.

Survey Methods

Participants in the short course sessions were asked to complete a short questionnaire at the end of each of the four weekly sessions which were divided into two topics. The survey was based on the educational objectives of each session. Participants were asked to rate their knowledge on each topic before the short course and after the short course. Answer choices were Poor, Fair, Good, and Excellent.

In order to gauge the potential multiplier effect, participants were asked to estimate the number of people with whom they would share the information from each short course session.

At the end of their last session attended, registrants were given a separate questionnaire to provide overall feedback on the short course.

Spanish versions of the questionnaires were available upon request.

A total of 601 weekly session questionnaires were completed by participants. The distribution by location is as follows: 237 from Waukesha, 180 from Sheboygan, and 184 from Bristol.

A total of 129 overall feedback questionnaires were completed.

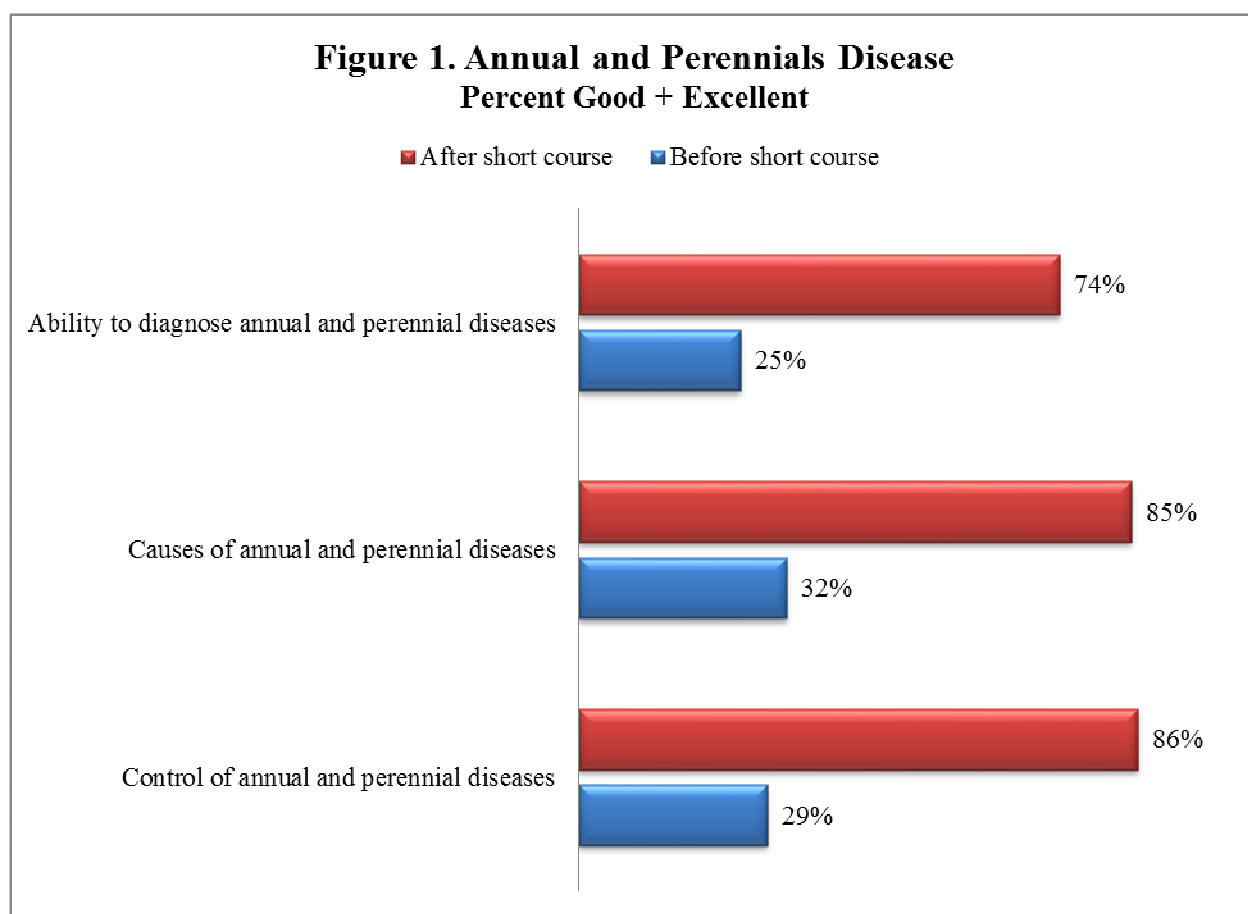
At the end of the overall feedback questionnaire, respondents were provided a space to write comments, recommendations for improvement, or requests for future speakers or topics. In addition, one question contained an “Other” answer choice in which the respondent could write an answer. **These written responses are contained in Appendix A.**

Appendix B contains a copy of the survey questionnaires with a complete quantitative summary of responses by question.

Week 1

The first subject in week 1 was “Annual and Perennials Disease Management” and was taught by Brian Hudelson. Figure 1 summarizes the changes in knowledge reported by the participants. The top bar in each pair is the percentage of respondents saying their knowledge after the short course was good or excellent. The bottom bar is the percentage who said their knowledge was good or excellent before the short course. This report uses the same design for Figure 2, Figure 5, Figure 6, Figure 9, Figure 10, Figure 13, and Figure 14.

As shown in Figure 1, respondents indicated knowledge increases in each of the three topic areas. Between 25 percent and 32 percent of participants rated their knowledge as good or excellent before the short course. After the course, the percentage who said their knowledge was good or excellent increased substantially, with 74 to 86 percent rating their knowledge as good or excellent.



Additional details are in Table 1, which indicates that the largest proportion of respondents (59 percent to 66 percent) rate their knowledge level after the short course as good. Prior to the short course, no more than 28 percent of respondents rated their knowledge of these three disease management topics as good. The proportion of participants who rated their knowledge level as excellent was between 15 percent and 21 percent afterward, compared to about 3 percent prior to the short course.

As noted earlier, these sessions were repeated three times in different locations. Participants at Bristol tended to rate their post-session ability to diagnose annual and perennial diseases higher than those who attended the Waukesha session. Participants who completed the Spanish version of the evaluation gave lower ratings to their pre-session knowledge about the causes of annual and perennial diseases.

Similarly, a smaller majority of participants at the Waukesha session rated their post-session knowledge about control of annual and perennial diseases as good or excellent compared to the Bristol and Sheboygan respondents.

Table 1. Annual and Perennials Disease Management: Subject Knowledge				
	After Short Course		Before Short Course	
	Good	Excellent	Good	Excellent
Ability to diagnose annual and perennial diseases	59%	15%	22%	3%
Causes of annual and perennial diseases	66%	18%	28%	4%
Control of annual and perennial diseases	65%	21%	26%	3%

The second subject in week 1 was “Insect Activity and the Weather” taught by Phil Pellitteri. Figure 2 summarizes the results, and indicates that participants reported substantial increases in their knowledge on the topics included in the session. Between 70 percent and 86 percent of respondents said their knowledge on these topics was good or excellent after the short course compared to 25 percent to 33 percent before short course.

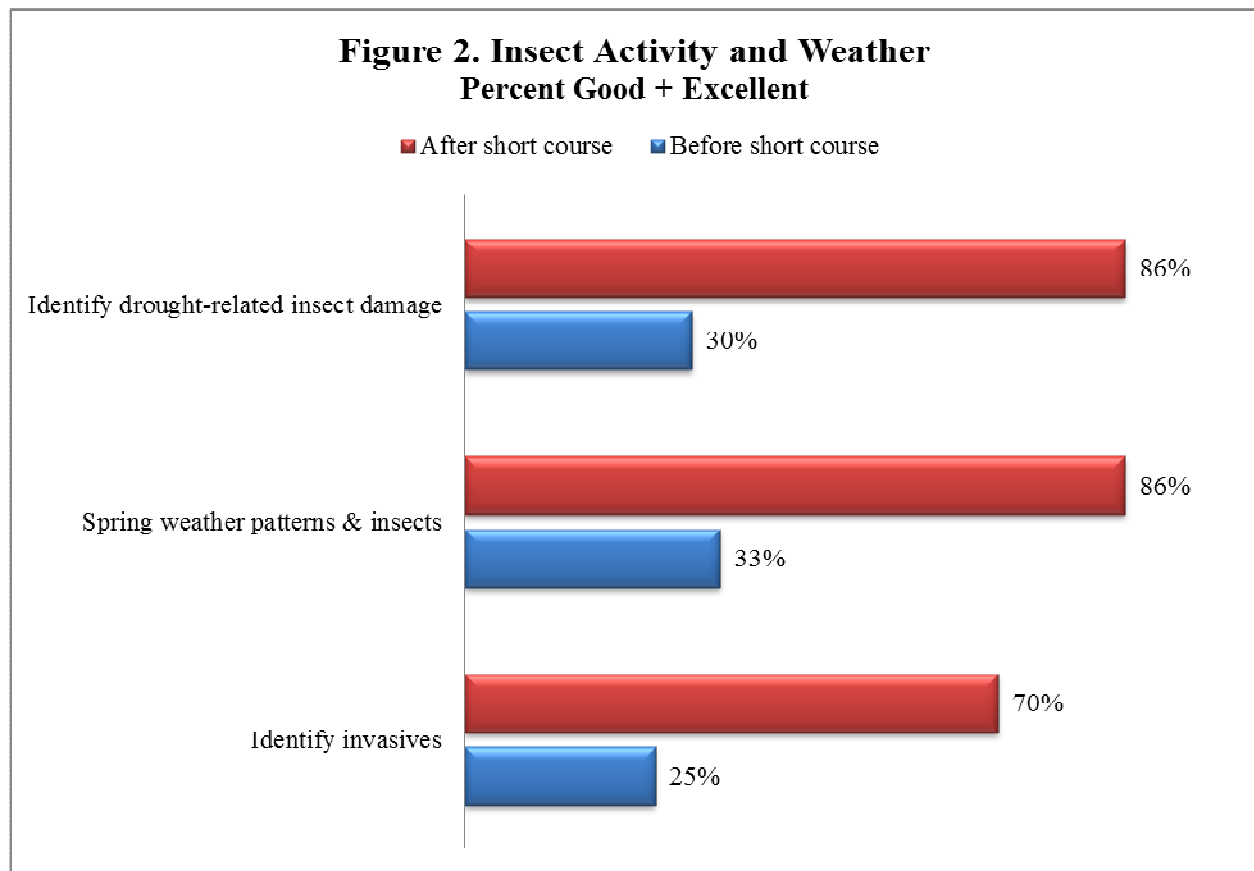


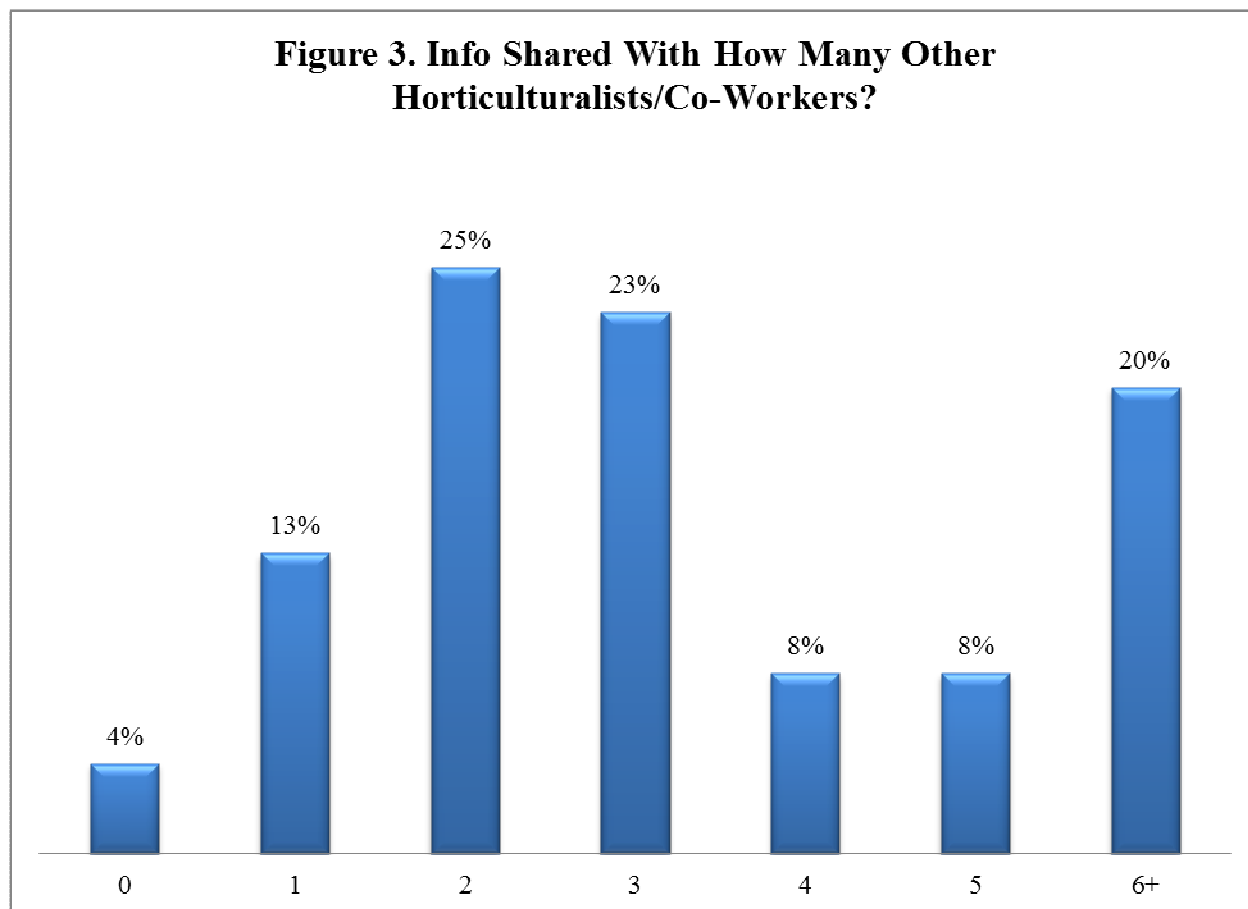
Table 2 provides additional detail and indicates that the largest proportion of respondents (51 percent to 66 percent) rate their knowledge level after the short course as good. Only 20 percent to 27 percent said their pre-session knowledge was good. The knowledge ratings in the excellent category increased from no more than 4 percent to between 19 percent and 25 percent.

Although knowledge gains were substantial for the ability to identify invasives, the gains were not quite as high as those for identifying drought related insect damage and understanding the relationship of spring weather patterns and insect activity.

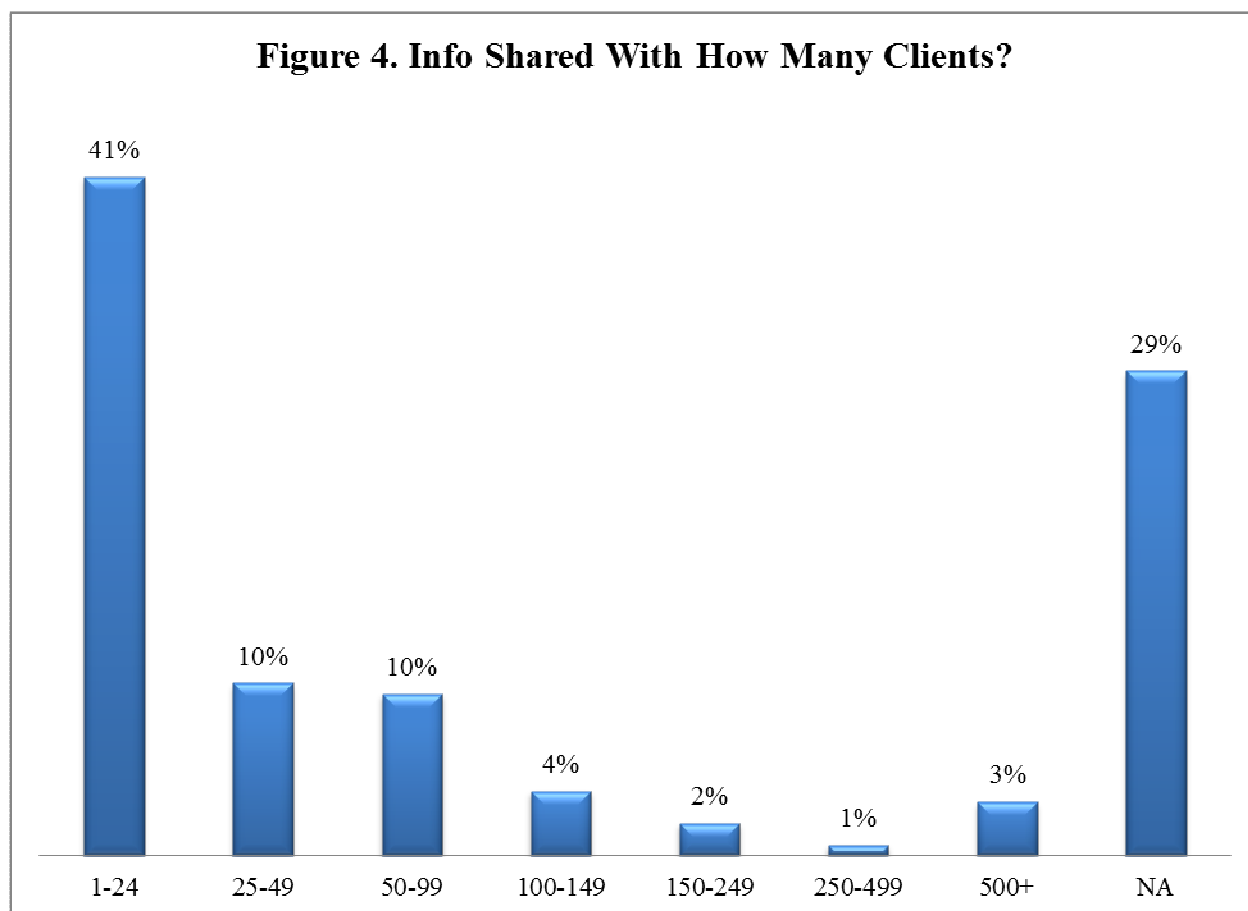
There were no statistically significant differences in the knowledge ratings among the three locations. Participants who completed the Spanish version of the evaluation gave lower ratings to their pre-session knowledge on spring weather patterns and insects and identifying non-native invasive plants.

Table 2. Insect Activity and the Weather: Subject Knowledge				
	After Short Course		Before Short Course	
	Good	Excellent	Good	Excellent
Identify drought-related insect damage	66%	20%	27%	3%
Spring weather patterns and insects	61%	25%	29%	4%
Identifying non-native, invasive insects	51%	19%	20%	4%

Figure 3 and Figure 4 indicate a strong multiplier effect. As indicated in Figure 3, nearly all participants said they will share information learned in week 1 with other horticulturalists/co-workers. Half of participants said they would share the short course information with 2 to 3 others. An additional 20 percent said they would share the information with at least six others.



When asked about sharing short course information with their clients, the greatest proportion (41 percent) indicated they would share the information with 1 to 24 clients. Nearly a third of participants said this question did not apply to them, and the SRC speculates that the respondents who chose this option did so because they do not have direct contact with clients.

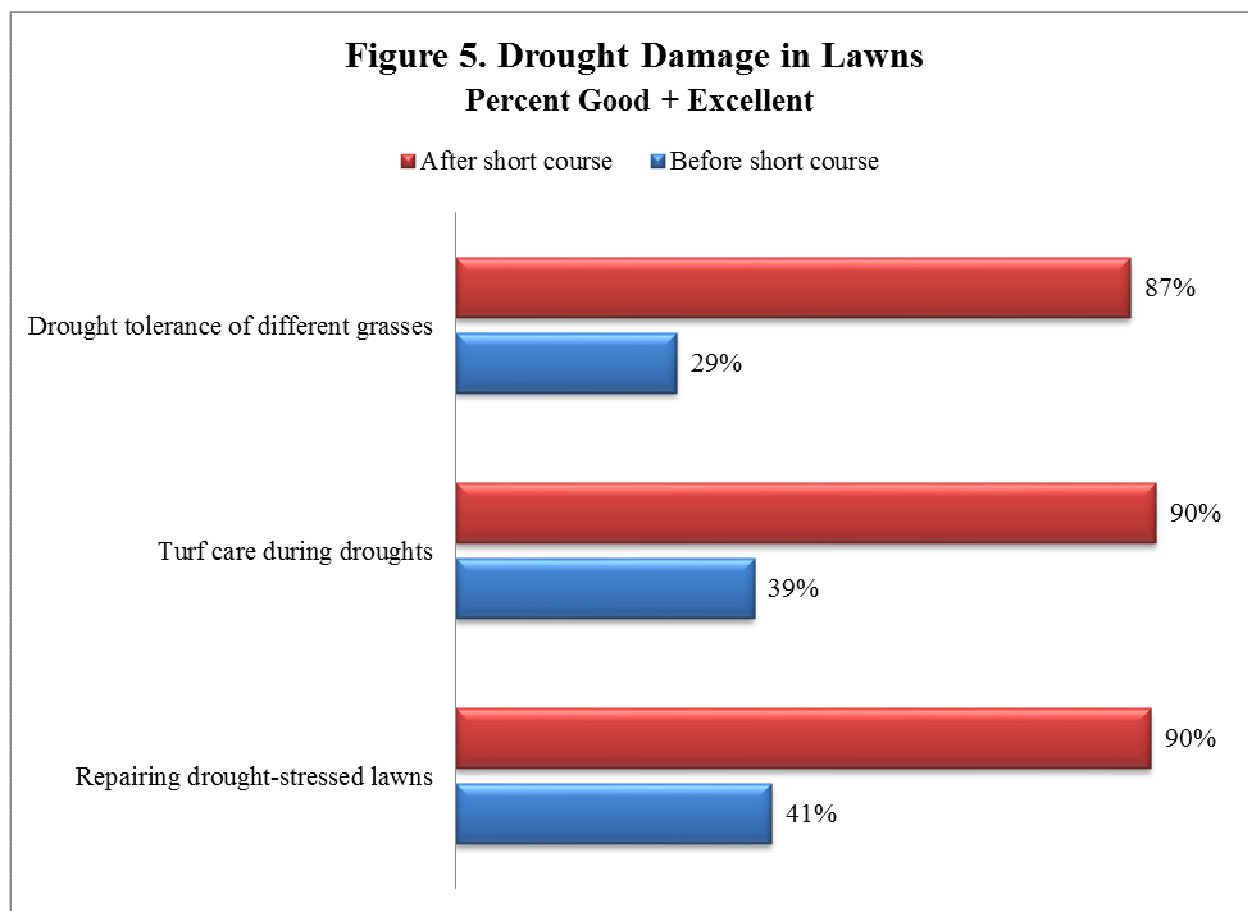


There were no statistically significant differences based on the location of the session with respect to the number of co-workers or number of clients with whom the information would be shared.

Week 2

The first of the two topics in week 2 was “Drought Damage in Lawns” taught by Doug Soldat. Content of the session included drought tolerance of different grasses, turf care during droughts, and repairing drought-stressed lawns

As shown in Figure 5, between 87 percent and 90 percent of participants said their knowledge on these topics was good or excellent after the short course compared to 29 percent to 41 percent before short course. The initial knowledge level about drought tolerance of different grasses was lower than for turf care during droughts and repairing drought-stressed lawns.



Additional details are in Table 3. The largest percentages of participants, about 57 percent, rated their post-session knowledge level as good. The percentage who said their initial knowledge level was excellent increased from the mid-single digits to at least 30 percent.

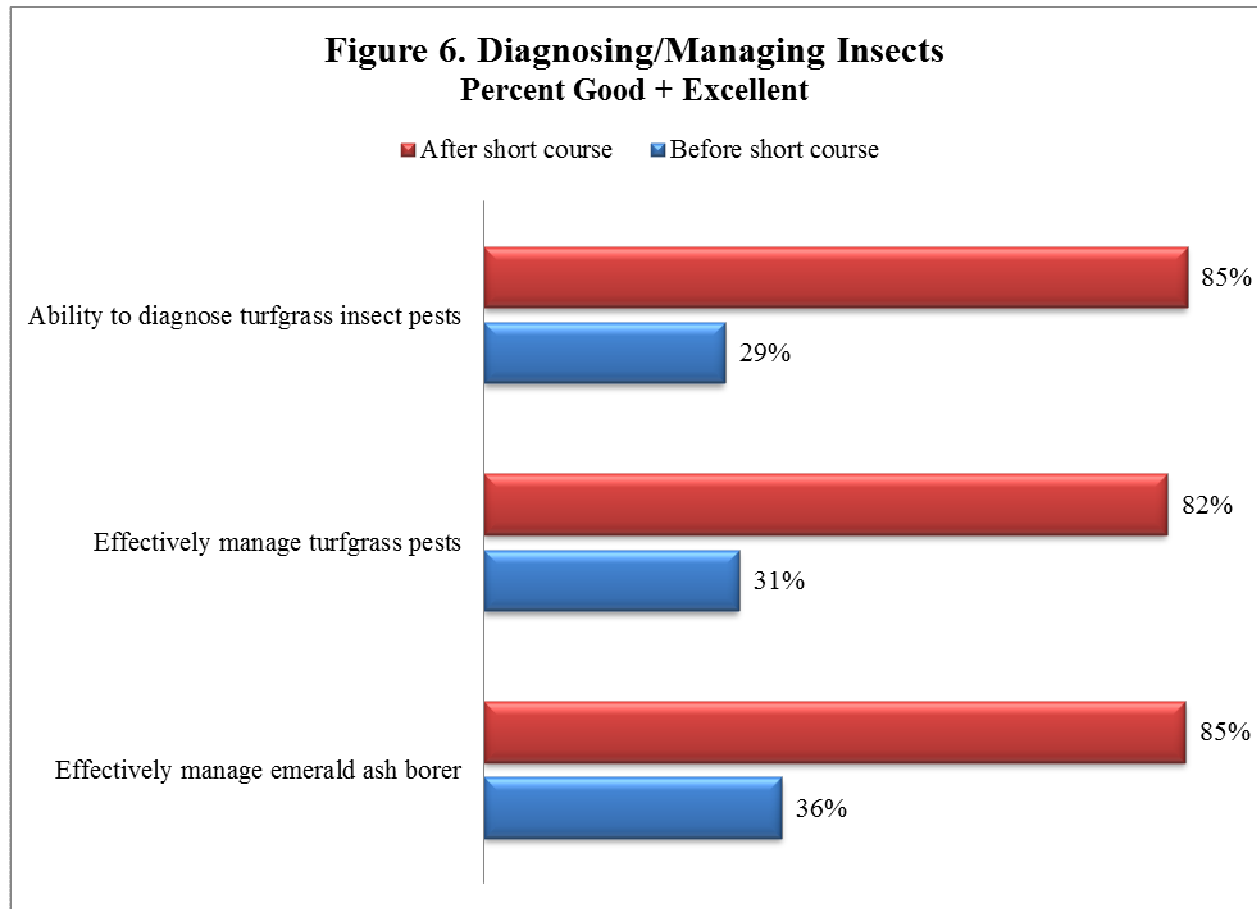
Table 3. Drought Damaged Lawns: Subject Knowledge

	After Short Course		Before Short Course	
	Good	Excellent	Good	Excellent
Drought tolerance of different grasses	56%	31%	23%	5%
Turf care during droughts	57%	33%	34%	5%
Repairing drought-stressed lawns	56%	34%	34%	6%

Attendees at the Bristol session were more likely to rate their post-session knowledge about drought tolerance of different grasses and about repairing drought-stressed lawns as good or excellent compared to participants at the Sheboygan and Waukesha locations.

The second topic in week 2 was “Diagnosing/Managing Insects” taught by Chris Williamson. Session content included ability to diagnose turfgrass insect pests, effective management of turfgrass pests, and effective management of the emerald ash borer.

Figure 6 indicates the percentage of respondents rating their knowledge as good or excellent after the short course ranged from 82 percent to 85 percent. Far fewer participants said their knowledge on these topics was good or excellent prior to the short course (29 percent to 36 percent).

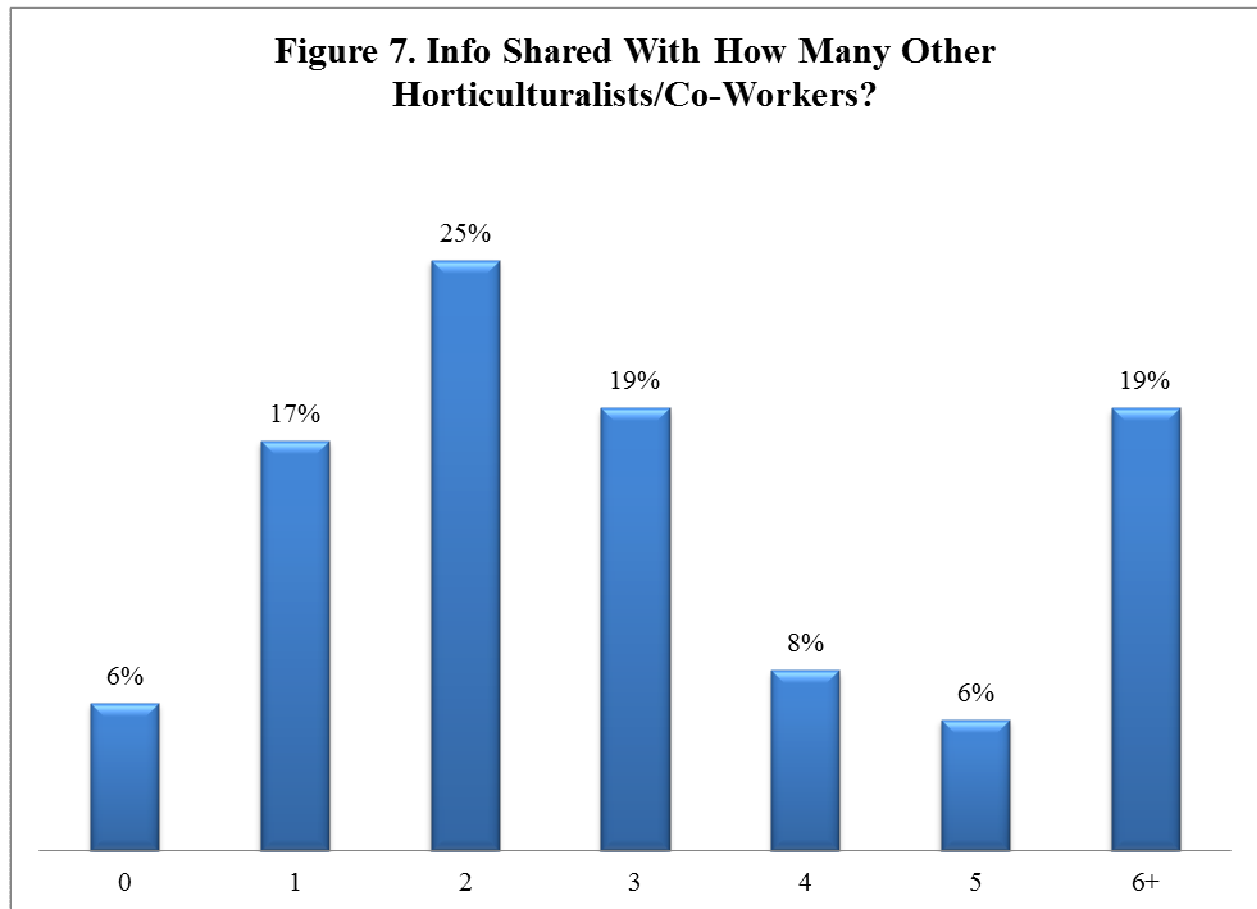


As shown in Table 4, the largest percentage of post-session assessments were in the good category, ranging from 52 percent to 59 percent. Ratings in the excellent category increased substantially. From a starting point in the single digits (4 percent to 8 percent), the percentage of those rating their knowledge as excellent rose to 26 percent to 33 percent.

Table 4. Diagnosing/Managing Insects: Subject Knowledge				
	After Short Course		Before Short Course	
	Good	Excellent	Good	Excellent
Ability to diagnose turfgrass insect pests	59%	26%	25%	4%
Effectively manage turfgrass pests	53%	29%	25%	6%
Effectively manage emerald ash borer	52%	33%	28%	8%

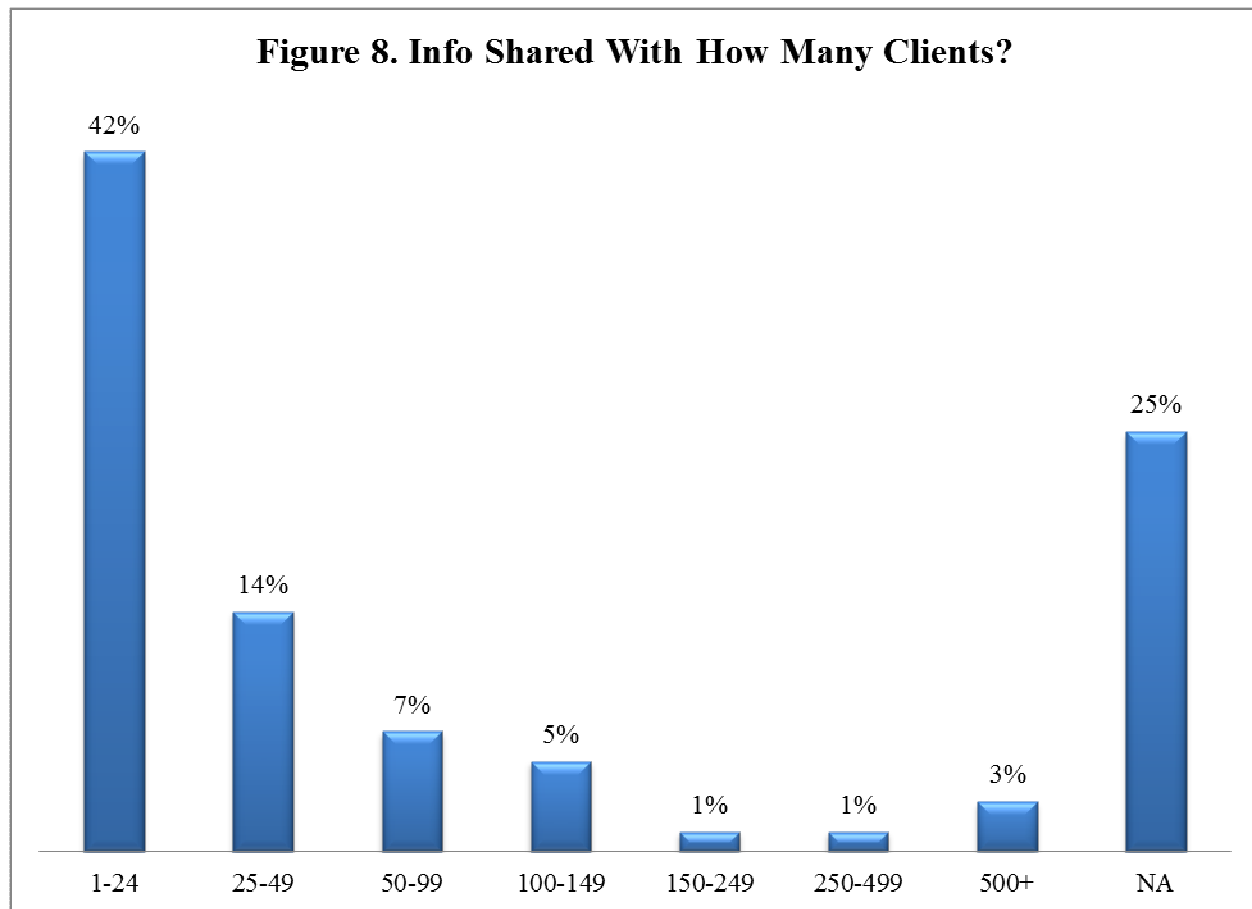
Bristol participants tended to rate their post session knowledge on all three topics higher than the Waukesha and Sheboygan participants.

As shown in Figure 7, 94 percent of participants indicated that they would share knowledge gained from week 2 with other horticulturalists/co-workers. Over 60 percent of participants said they would share this information with 1 to 3 others. Nearly 20 percent plan to share it with at least 6 others.



A smaller proportion of participants at the Sheboygan session said they would share the information with six or more additional horticulturalists/co-workers.

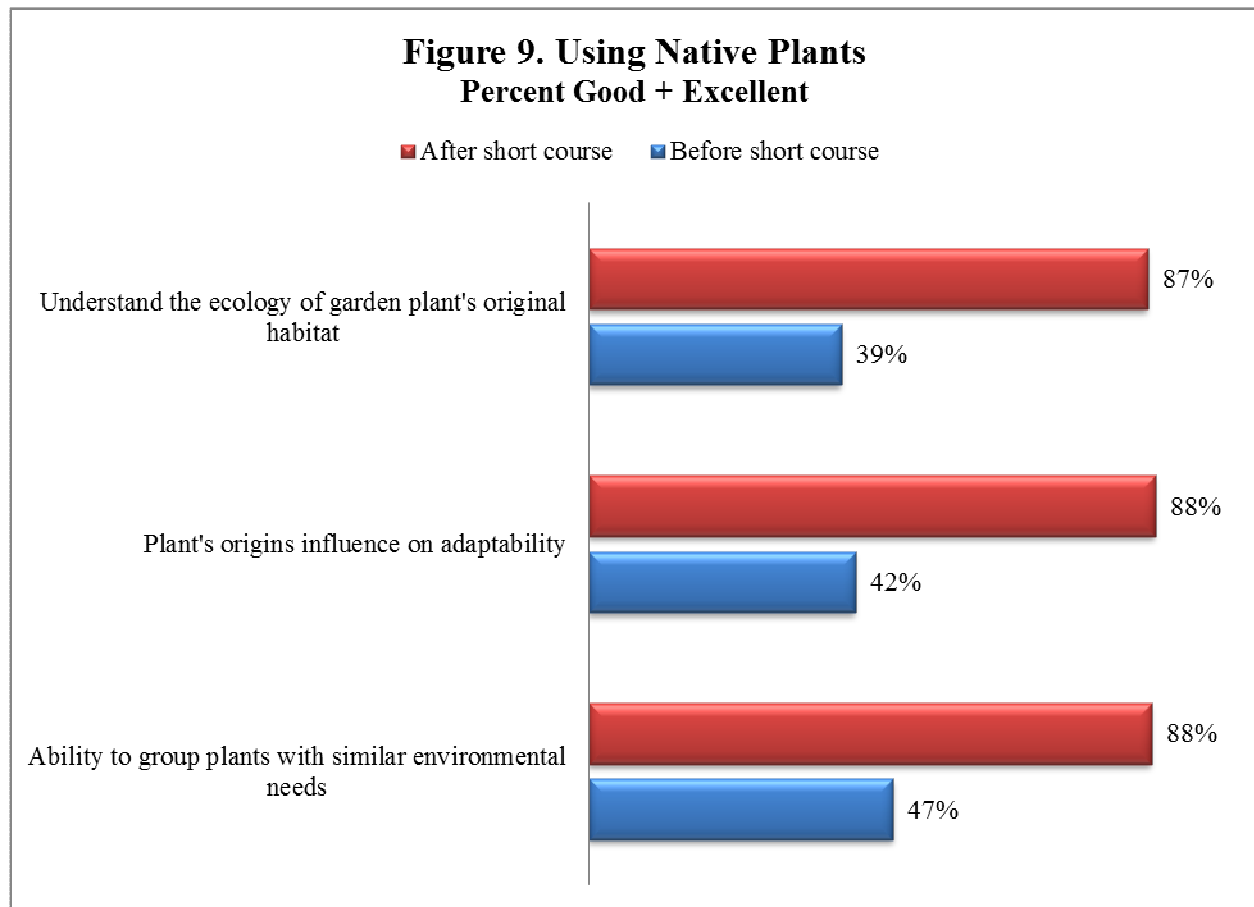
When asked about sharing short course information with their clients, Figure 8 indicates the greatest proportion (42 percent) said they would share the information with 1 to 24 clients. One in four participants said this question did not apply to them.



Week 3

“Using Native Plants” was the first topic in week 3 and was taught by Jim Ault. Content included understanding the ecology of a garden plant’s original habitat, how a plant’s origins influences its landscape adaptability, and grouping plants with similar environmental needs in landscapes.

As shown in Figure 9, respondents again report substantial knowledge gains after the session, with seven of eight indicating their post-session knowledge as good or excellent. Prior to the session between 39 percent and 47 percent rated their knowledge as good or excellent.



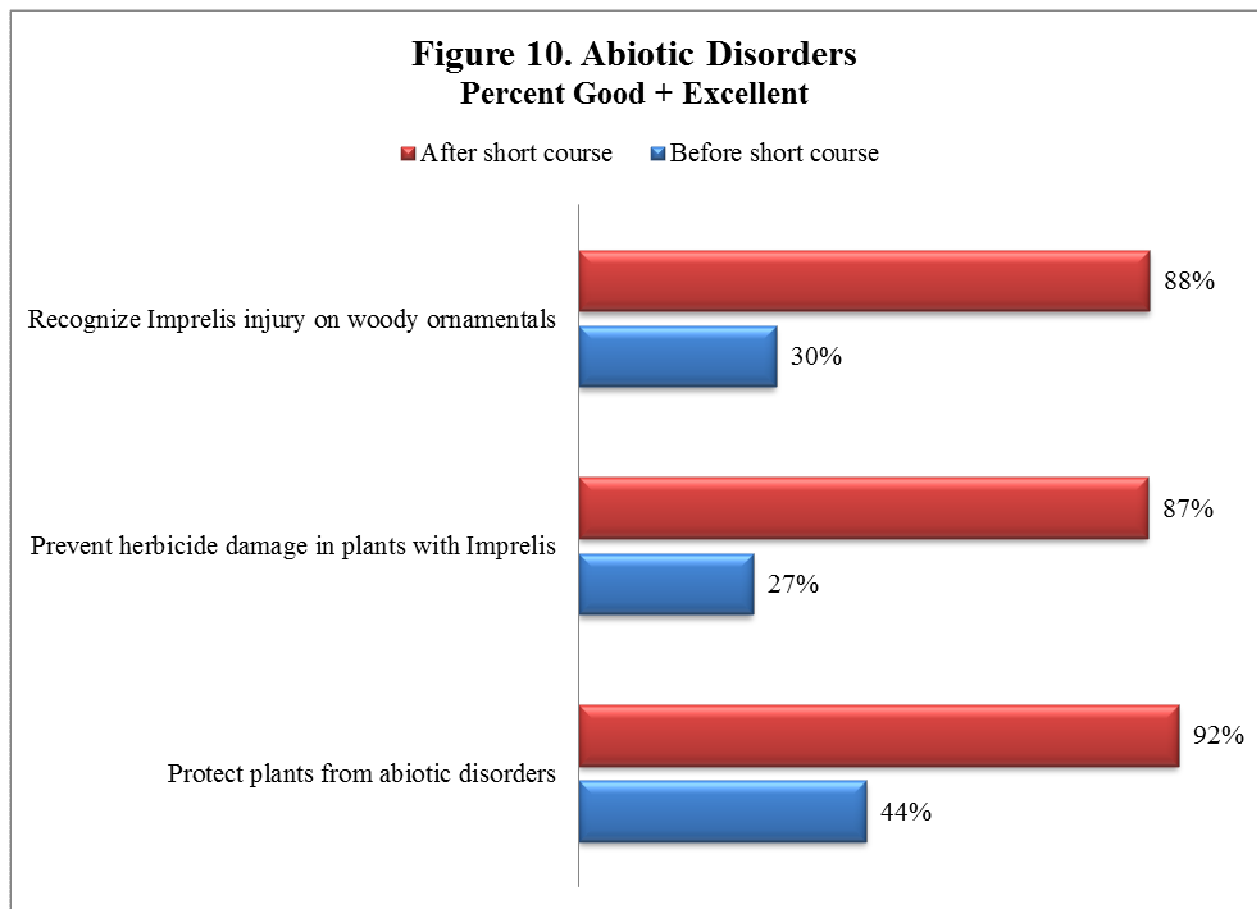
There were no statistically significant differences based on the location of the session.

As we have seen in previous tables, Table 5 shows the largest proportion of respondents categorized their post-session knowledge on these topics as good. About a third of participants said their knowledge level was excellent.

Table 5. Using Native Plants: Subject Knowledge				
	After Short Course		Before Short Course	
	Good	Excellent	Good	Excellent
Understand the ecology of a garden plant's original habitat	56%	31%	35%	5%
How a plant's origins influences its landscape adaptability	52%	36%	35%	6%
Ability to group plants with similar environmental needs in your landscapes	53%	34%	37%	10%

The second session in week 3 focused on abiotic disorders and was taught by Laura Jull. Topics included how to recognize Imprelis injuries, how to prevent herbicide damage in plants with Imprelis, and how to protect plants from abiotic disorders. As indicated in Figure 10, prior to the session between 27 percent and 44 percent of participants reported their knowledge as good or excellent on these topics. After the session, respondents report large gains, with 87 percent to 92 percent saying their knowledge level was good or excellent.

There were no statistically significant differences among the responses based on location.

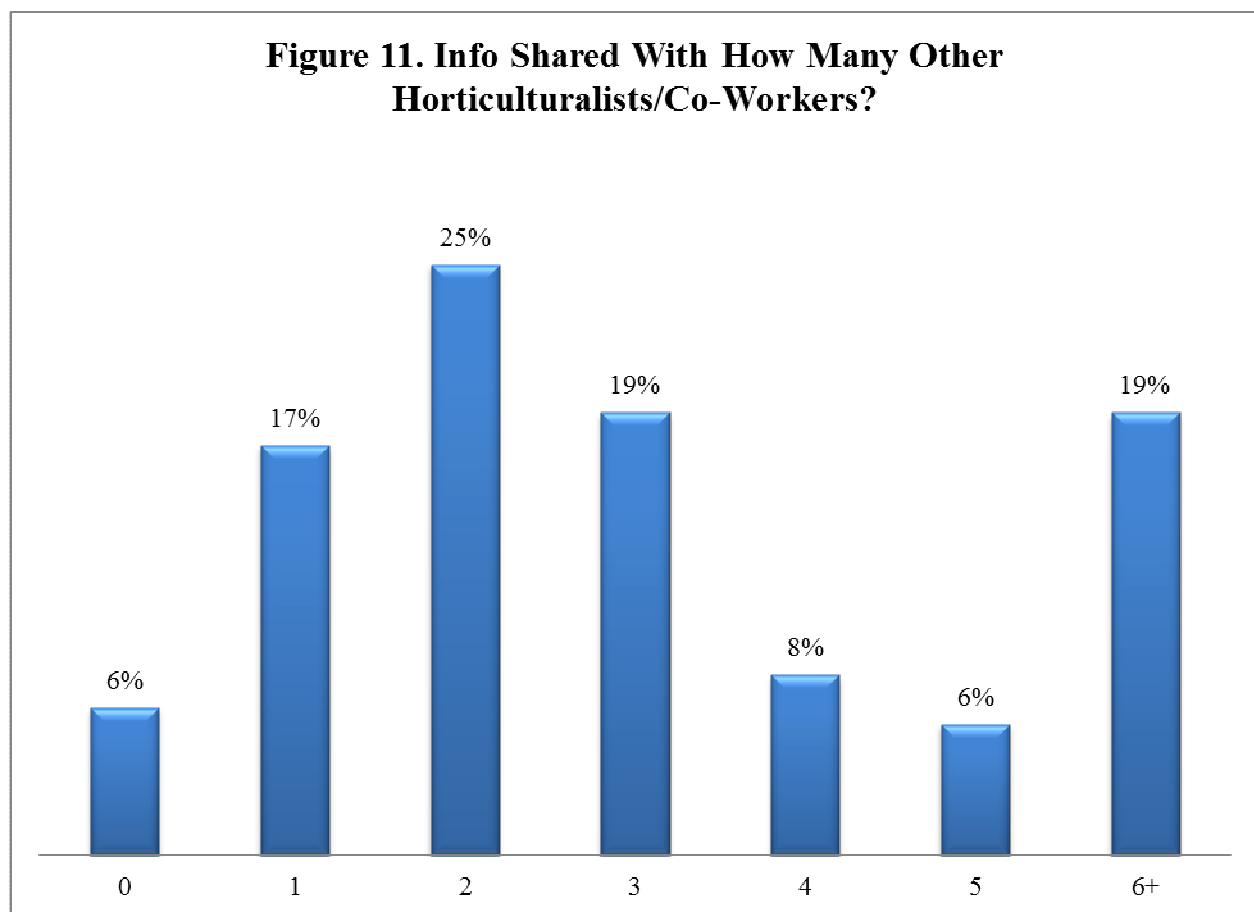


Consistent with the results from earlier sessions, Table 6 shows the largest portion of respondents rated their post-session knowledge for all three topics as good. Similarly, the percentage of respondents rating their post-session knowledge as excellent ranged between 24 percent and 33 percent after starting in the single digits.

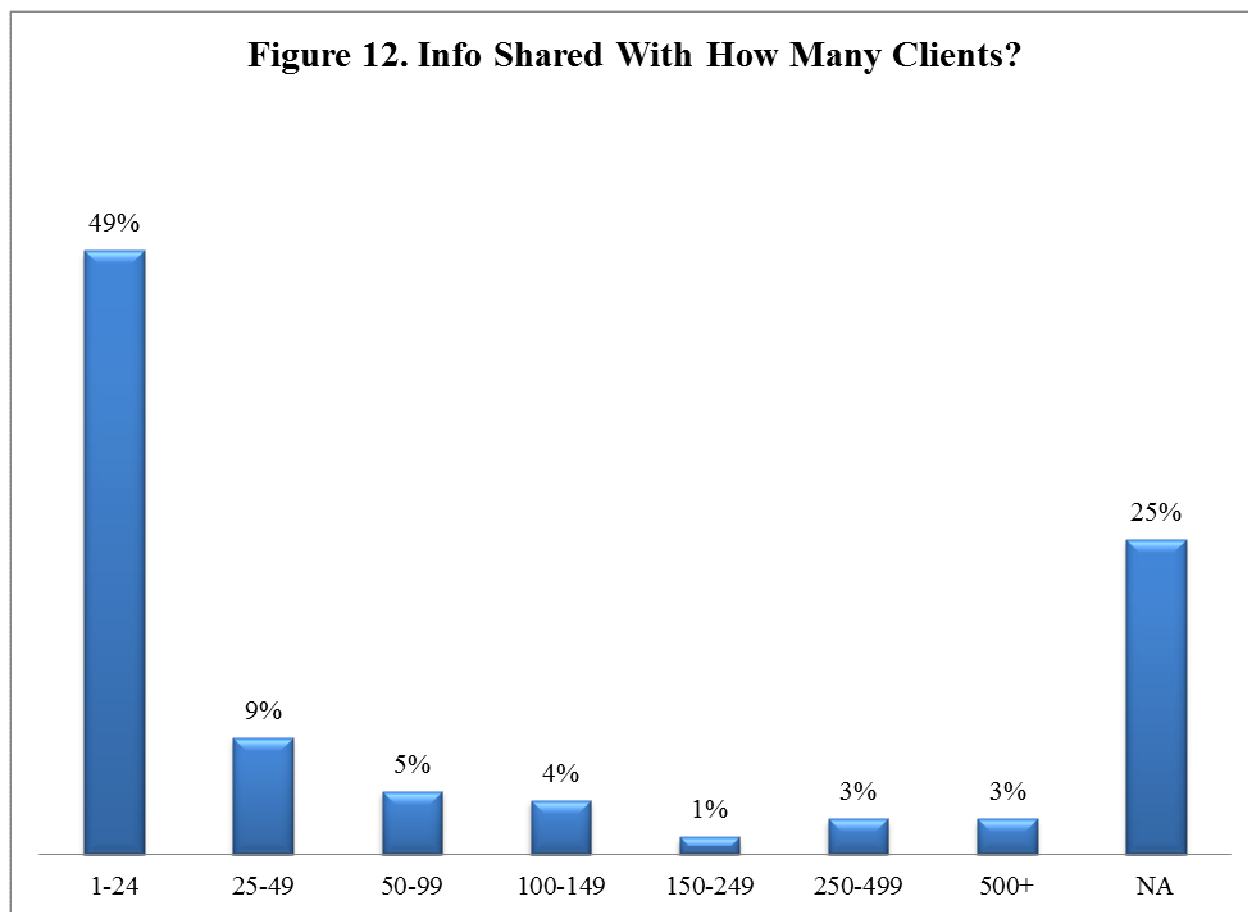
Table 6. Abiotic Disorders: Subject Knowledge

	After Short Course		Before Short Course	
	Good	Excellent	Good	Excellent
Ability to recognize Imprelis injury on woody ornamentals	61%	27%	24%	6%
How to prevent herbicide damage in plants with Imprelis injury	63%	24%	23%	3%
How to protect plants from abiotic disorders	59%	33%	39%	5%

Figure 11 continues to show a multiplier effect, as 94 percent of participants indicated they will share the information learned in week 3 with others working in landscape and grounds maintenance. Sixty-one percent will share the information with 1 to 3 others, while nearly one in five will share their knowledge with at least 6 other horticulturalists/co-workers. Participants at the Waukesha session were more likely to say they will share the information with 6 or more others.



When asked about sharing short course information with their clients, Figure 8 indicates that half of respondents said they would share the information with 1 to 24 clients. One in four participants said this question did not apply to them.

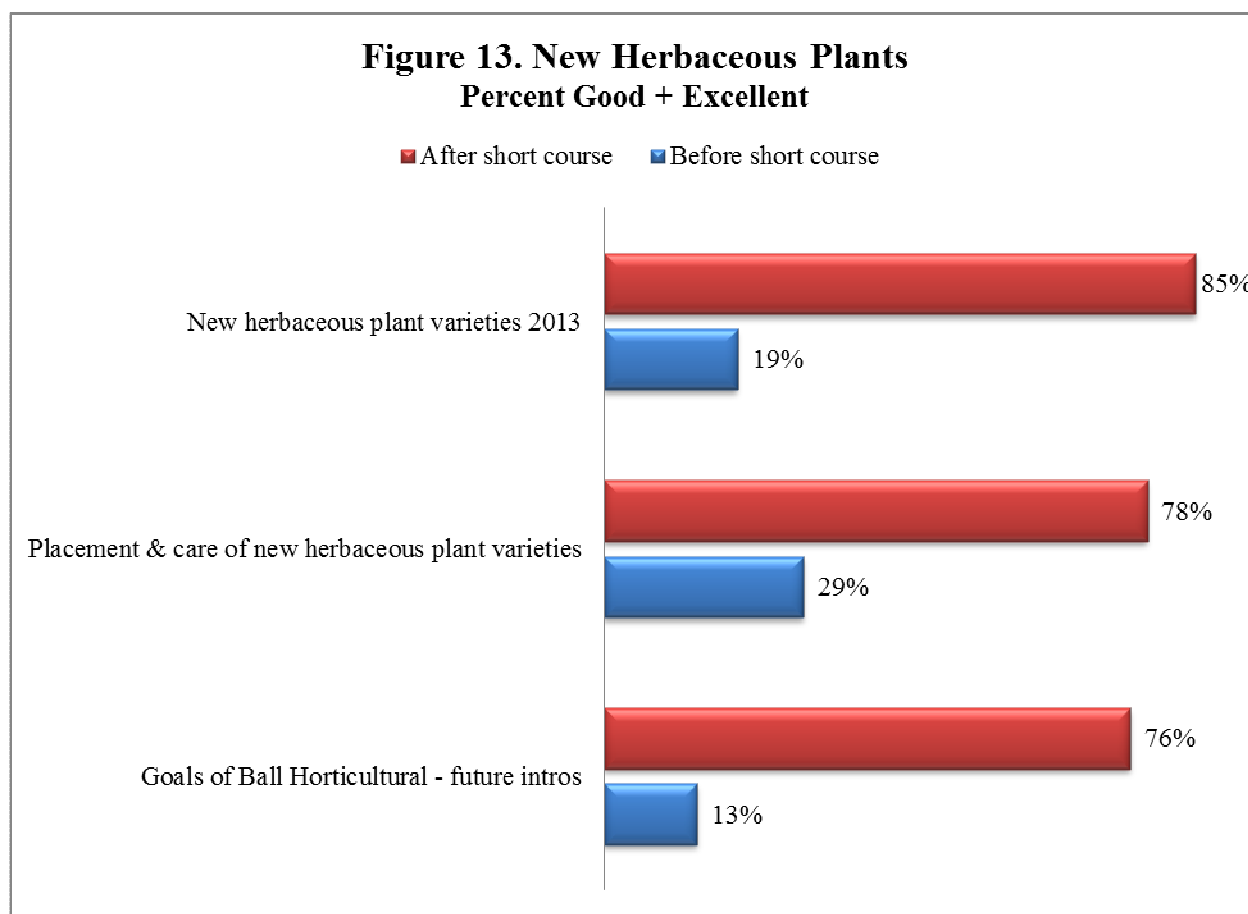


There were no statistically significant differences based on location.

Week 4

The first session of week four focused on new herbaceous plants. The instructor was Jim Nau from Ball Horticultural. Topics included new herbaceous varieties for 2013, placement and care of new herbaceous varieties, and the goals of Ball Horticultural regarding future herbaceous plant introductions.

Consistent with the overall pattern seen in the results of weeks 1, 2, and 3, Figure 13 shows increases in knowledge on the topics after the session. Prior to the session, between 13 percent and 29 rated their pre-session knowledge as good or excellent; after the session 76 percent to 85 percent, said their knowledge on these topics was good or excellent. Not surprisingly, relatively few participants had a good or excellent understanding of planned future introductions by Ball Horticultural (13%), but 76 percent said they had a good or excellent understanding of this topic after the session.



There were no statistically significant differences in the responses from the three locations.

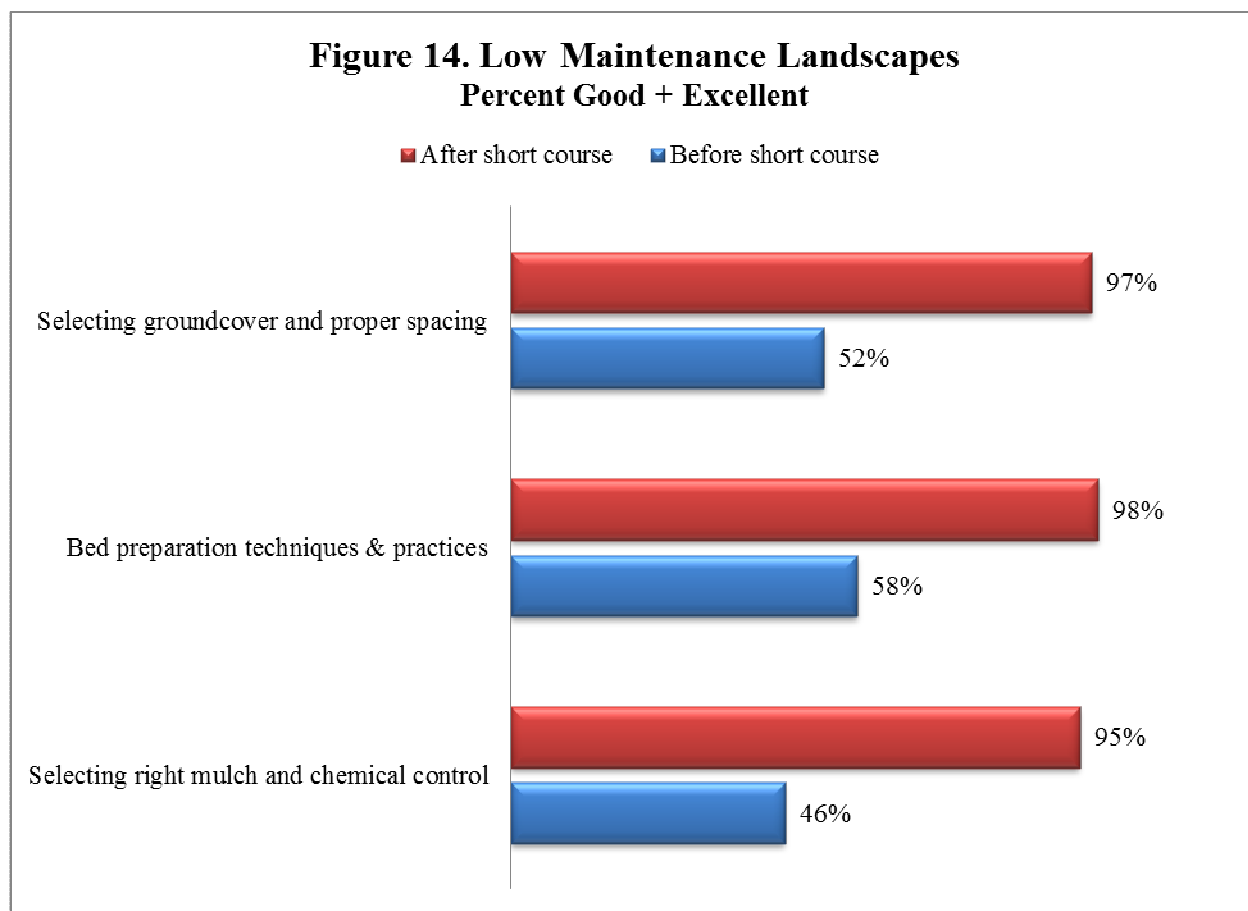
Table 7 indicates that the largest proportion of participants said their post-session knowledge was good, ranging from 53 percent to 57 percent. Between 22 percent and 28 percent rated their post-session knowledge as excellent after starting in the single digits.

Table 7. New Herbaceous Plants: Subject Knowledge

	After Short Course		Before Short Course	
	Good	Excellent	Good	Excellent
Herbaceous plant varieties new in 2013	57%	28%	15%	4%
Correct placement and care of new herbaceous plant varieties	54%	24%	25%	3%
Goals of Ball Horticultural regarding future plant introductions	53%	22%	10%	3%

Low maintenance landscapes were the focus of the second session in week 4, and the presenter was Dave Wanniger. Topics included selecting groundcover and proper spacing, bed preparation techniques and practices, and selecting the right mulch and chemical control. Figure 14 shows that the pre-session knowledge levels, 46 percent to 58 percent good or excellent, tended to be higher than other topics in the short course. Post-session ratings were also higher than other topics, ranging from 95 percent to 98 percent as good or excellent.

Participants at the Waukesha site tended to rate their initial knowledge for selecting groundcover and proper spacing and bed preparation higher than the participants in Bristol and Sheboygan.



There were no statistically significant differences among the responses from the three locations.

As shown in Table 8, the percentage of respondents rating their knowledge on these topics as excellent after the session was higher overall than other topics in the short course. Half of the respondents said their knowledge level about bed preparation and selecting mulch and chemicals was excellent, and over 40 percent rated their ability to select groundcover plants was excellent. Prior to the session, no more than 12 percent said their knowledge level was excellent. The remainder of participants rated their post-session knowledge as good, ranging from 47 percent to 55 percent.

Table 8. Low Maintenance Landscapes: Subject Knowledge

	After Short Course		Before Short Course	
	Good	Excellent	Good	Excellent
Selecting groundcover plants and their proper spacing	55%	42%	45%	8%
Bed preparation techniques and practices	49%	48%	46%	12%
Selecting right mulch and chemical control	47%	47%	35%	11%

As seen in previous weeks' sessions, participants in week 4 indicated a strong multiplier effect. Figure 15 shows 92 percent said they will share session information with additional horticulturalists/co-workers. Half of respondents will share their knowledge with 1 to 3 others, while 20 percent will share with at least six others.

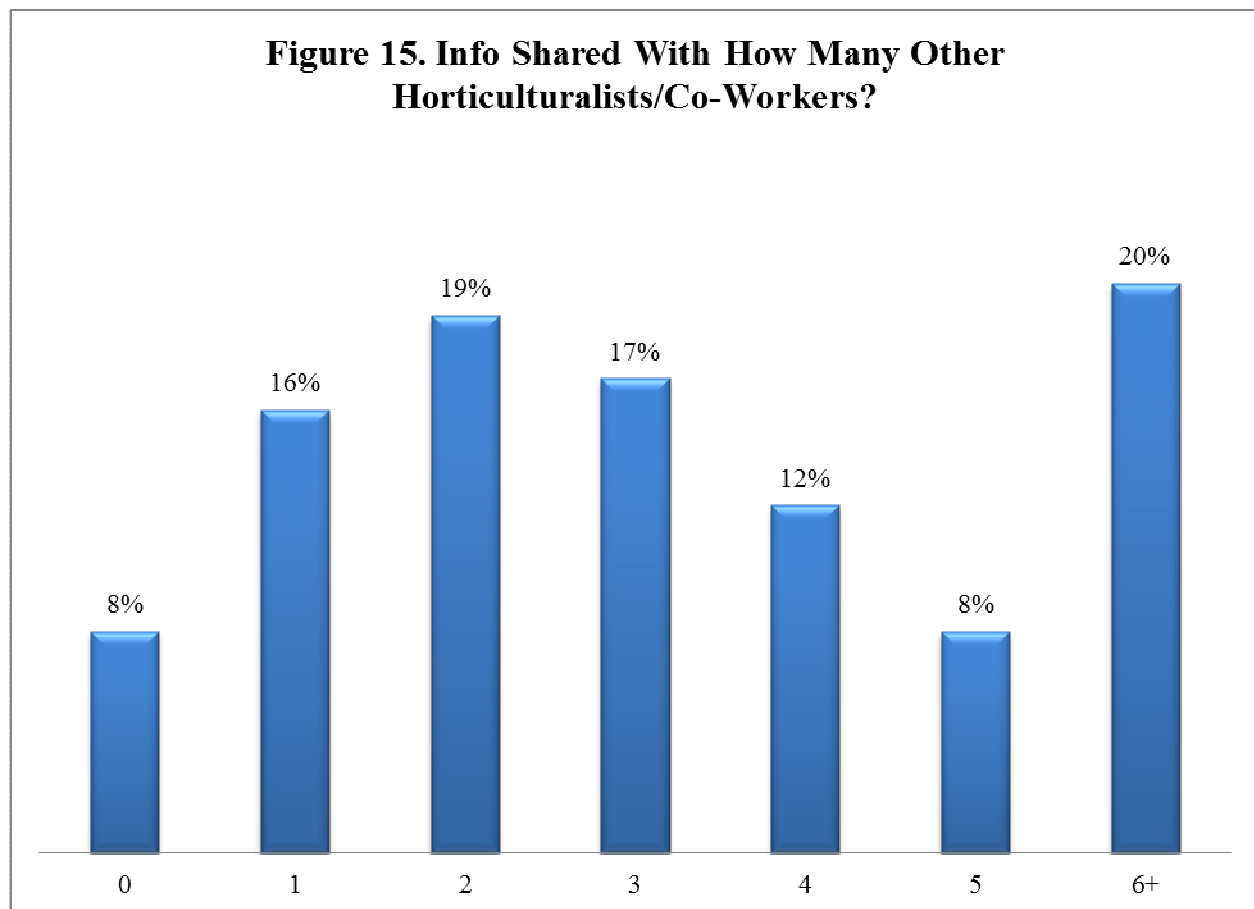
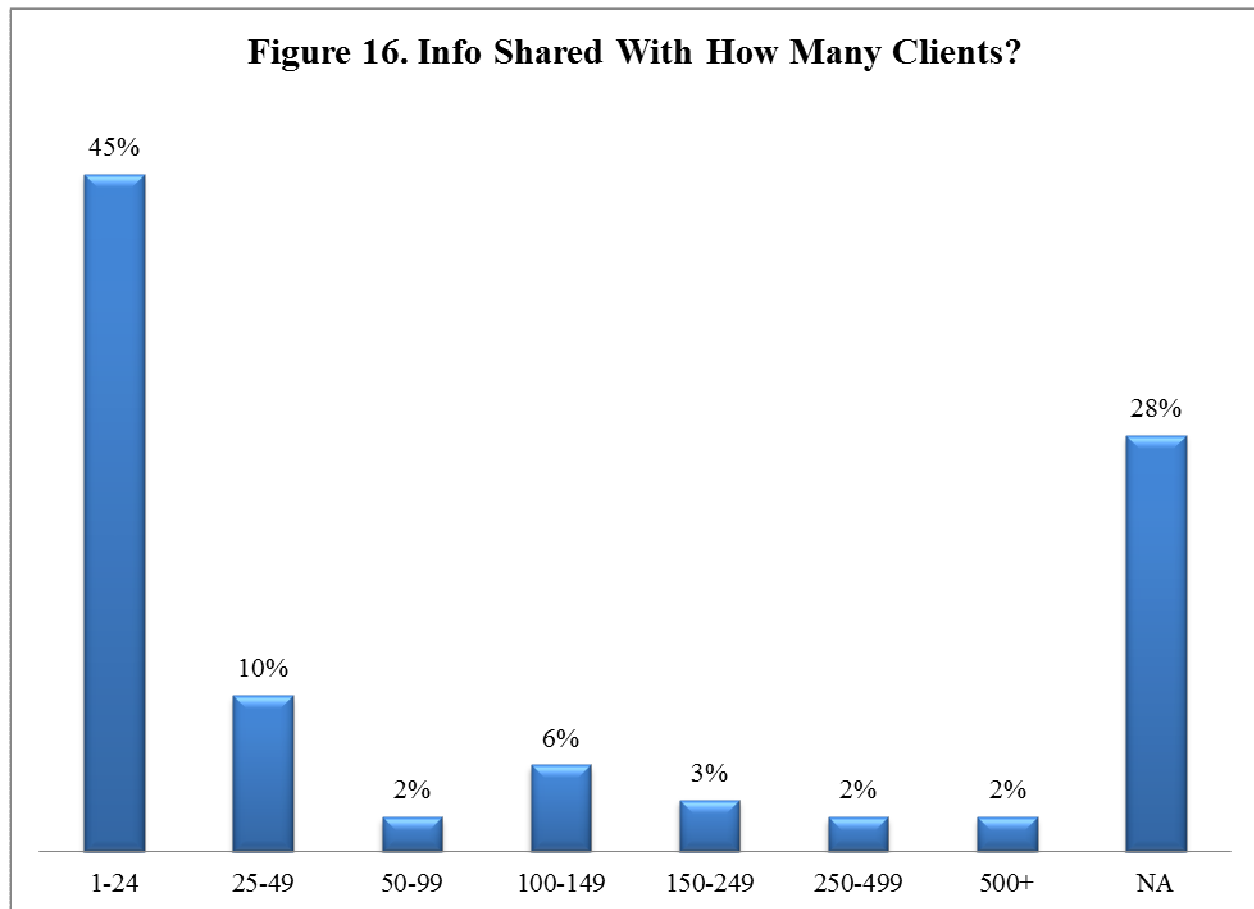


Figure 16 shows that a large majority of participants also expect to share the information from week 4 with their clients. Nearly half (45 percent) indicated they plan to share the information with 1 to 24 clients.



Summary of Knowledge Change

The SRC calculated an average of participants' ratings all topics and sessions. The results are shown in Table 9 and confirm the knowledge gains described throughout this report.

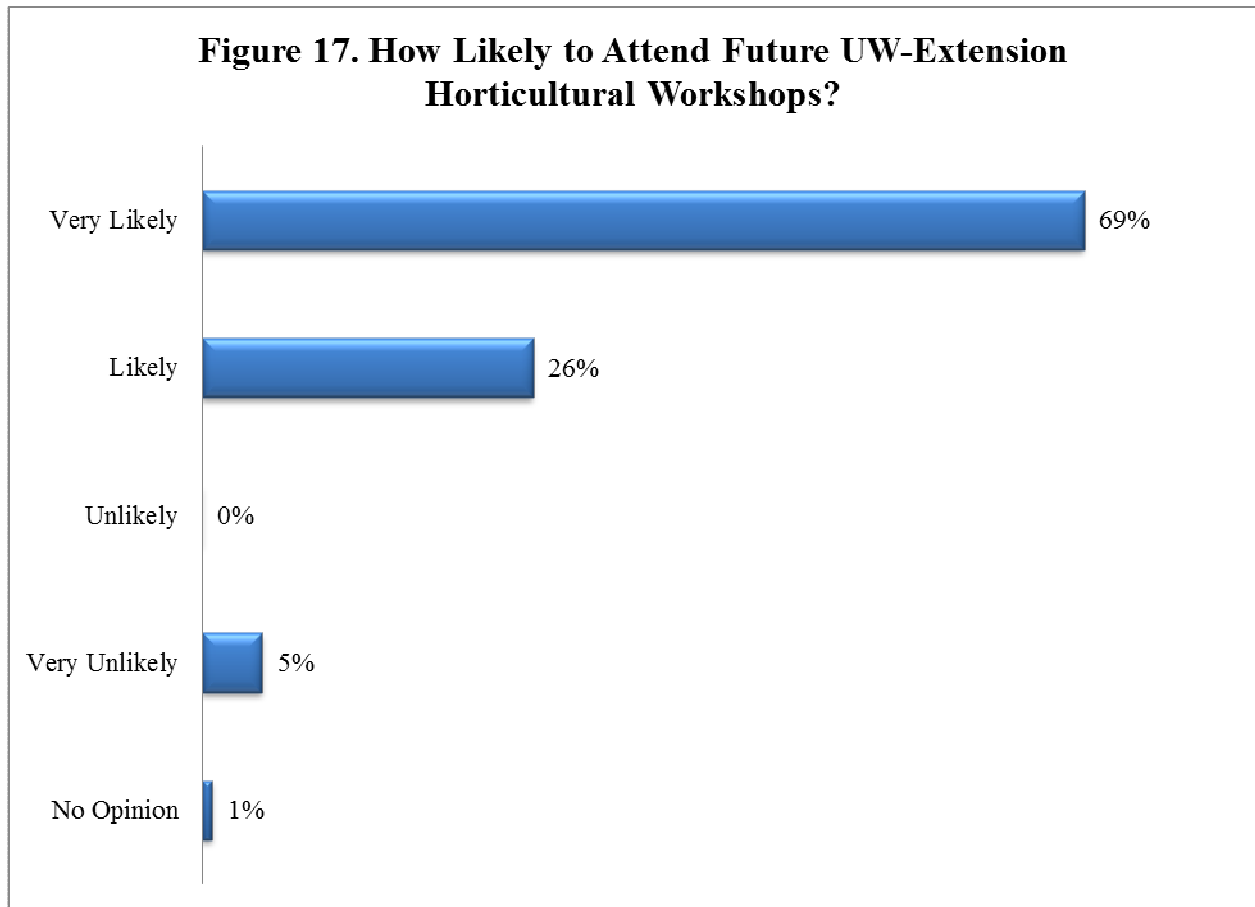
When measured across all sessions and topics, the percentage of respondents who rated their pre-session knowledge as good rose from 29 percent to 57 percent afterward. The percentage of respondents who rated their knowledge level as excellent increased from 5 percent to 29 percent.

Table 9. Overall Knowledge Ratings		
Rating	After	Before
Poor	1%	26%
Fair	14%	40%
Good	57%	29%
Excellent	29%	5%
Total	100%	100%

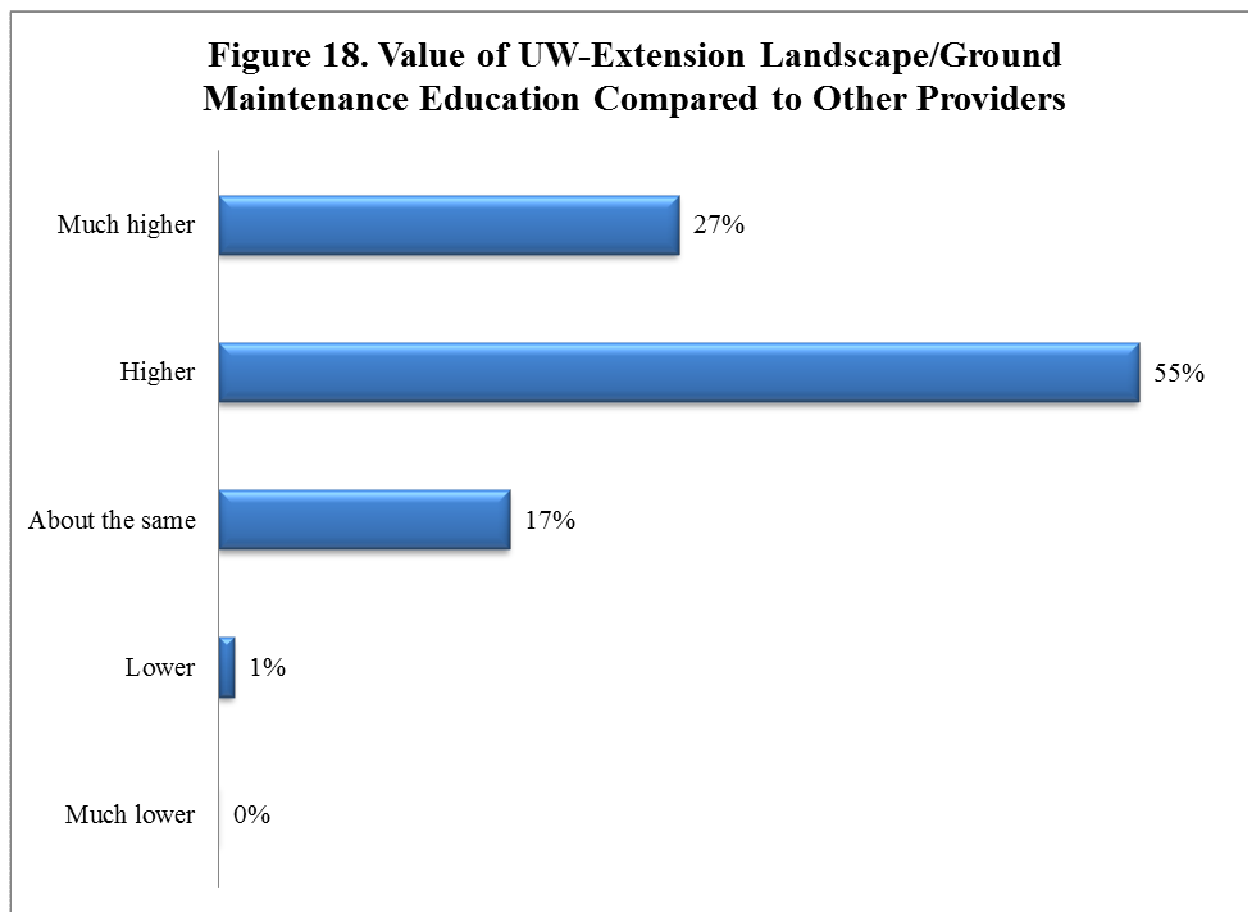
Overall Evaluation

At the last session attended, each participant was asked to provide an overall evaluation of the short course.

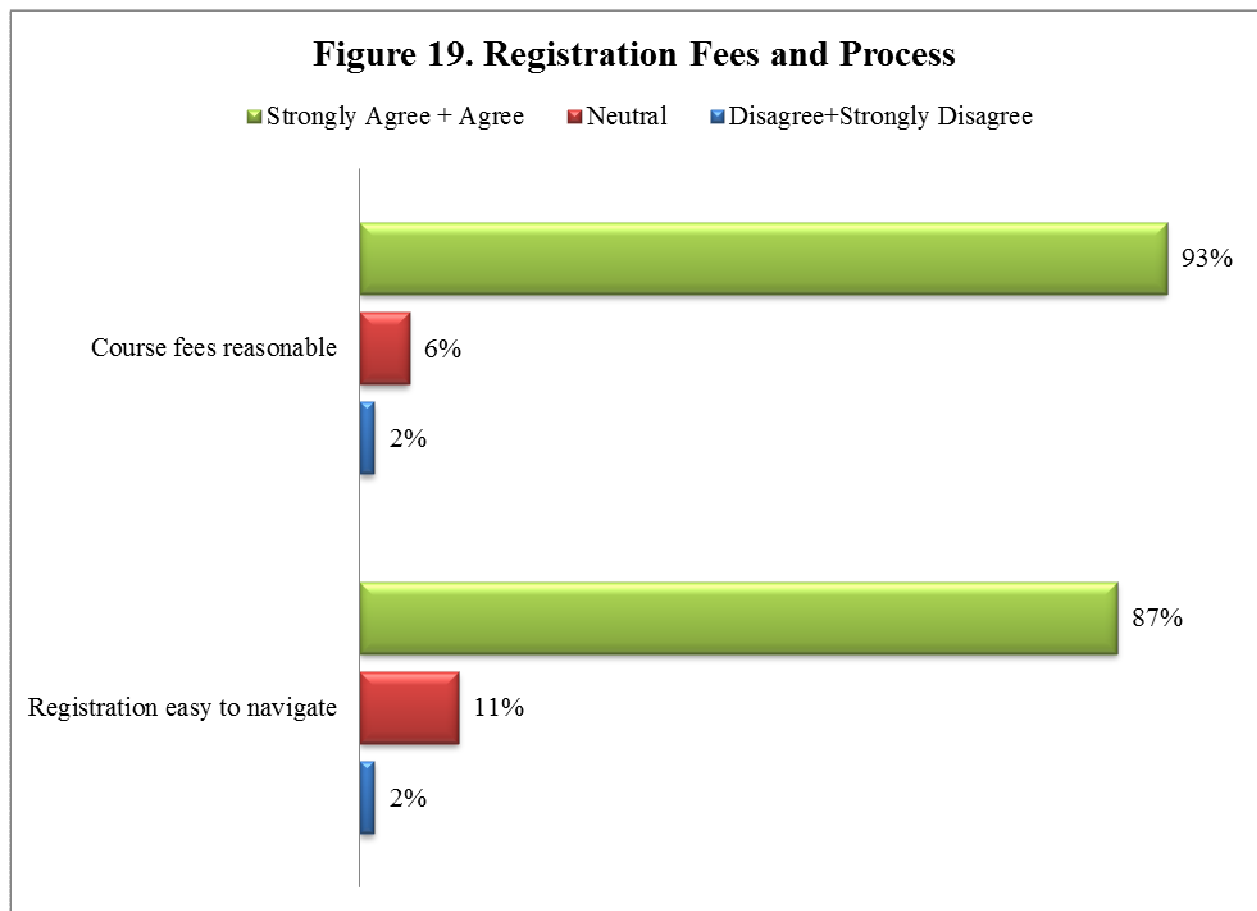
Figure 17 shows a high degree of satisfaction among respondents with their experience in this short course. 95 percent of participants said they are likely to attend future horticultural workshops offered by UW-Extension, and largest proportion by far (69 percent) said they are “very” likely to do so.



In a similar fashion, respondents gave high marks to the value of this UW-Extension short course compared to other providers' offerings. Figure 18 shows that four in five participants said the value of this short course was higher or much higher than other providers. Only 1 percent said the value was lower or much lower.



When asked about the cost of the short course and the registration process, Figure 19 indicates that nearly all participants (93percent) agreed or strongly agreed that the fees were reasonable. Nearly as many (87 percent) indicated that the registration process was reasonable.



Taken as a group, the responses in shown in Charts 17, 18, and 19 indicate that most participants were very pleased with their experience in the short course. They found the fee to be reasonable, the registration process easy, the content valuable, and, thus, they are likely to participate again.

Given the high marks that participants gave to the short course, it is not surprising that 86 percent are returnees, having attended the short course in previous years. A third of participants said they have attended 2 to 5 short courses, including this year. One in four said they have attended 6 to 10 short courses, and 20 percent have attended at least 16 times.

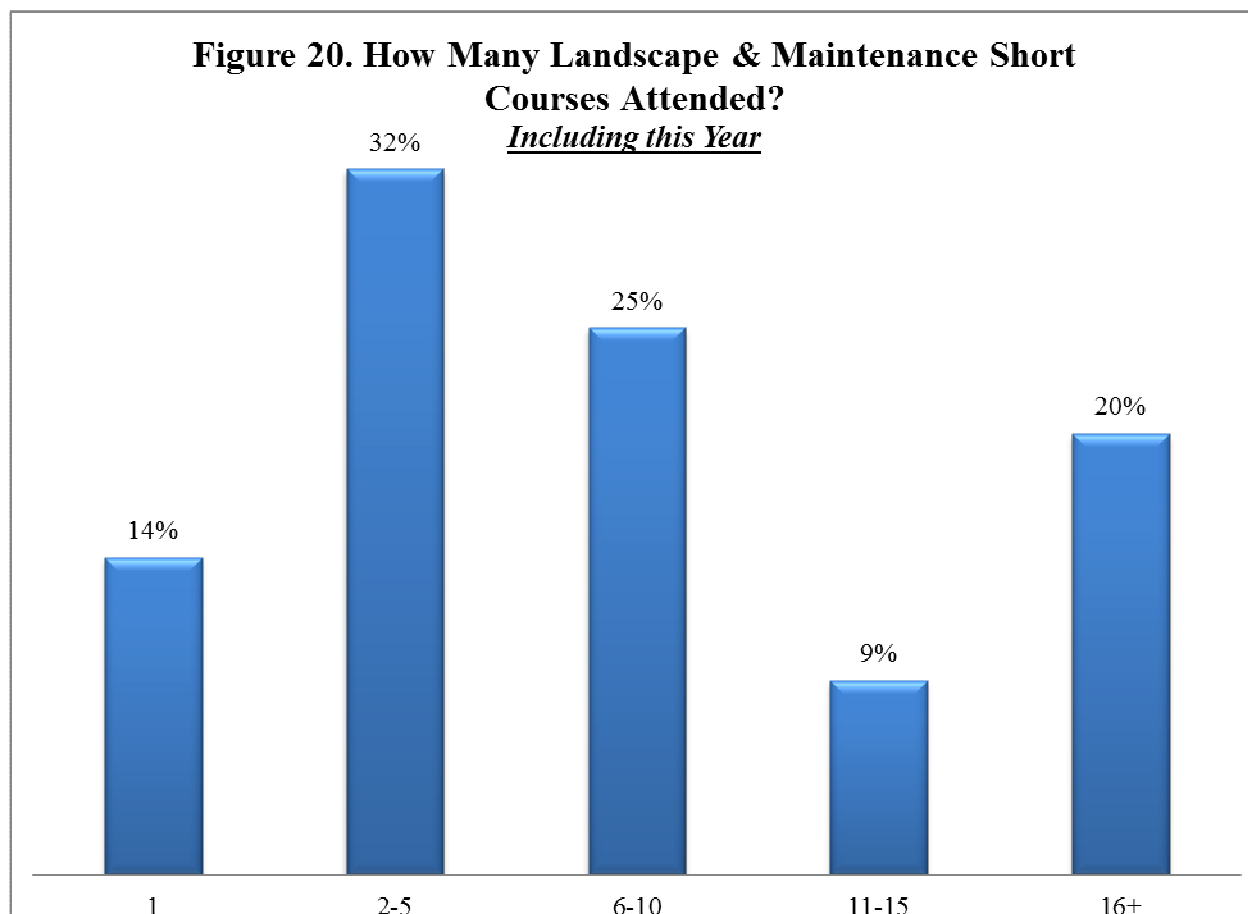
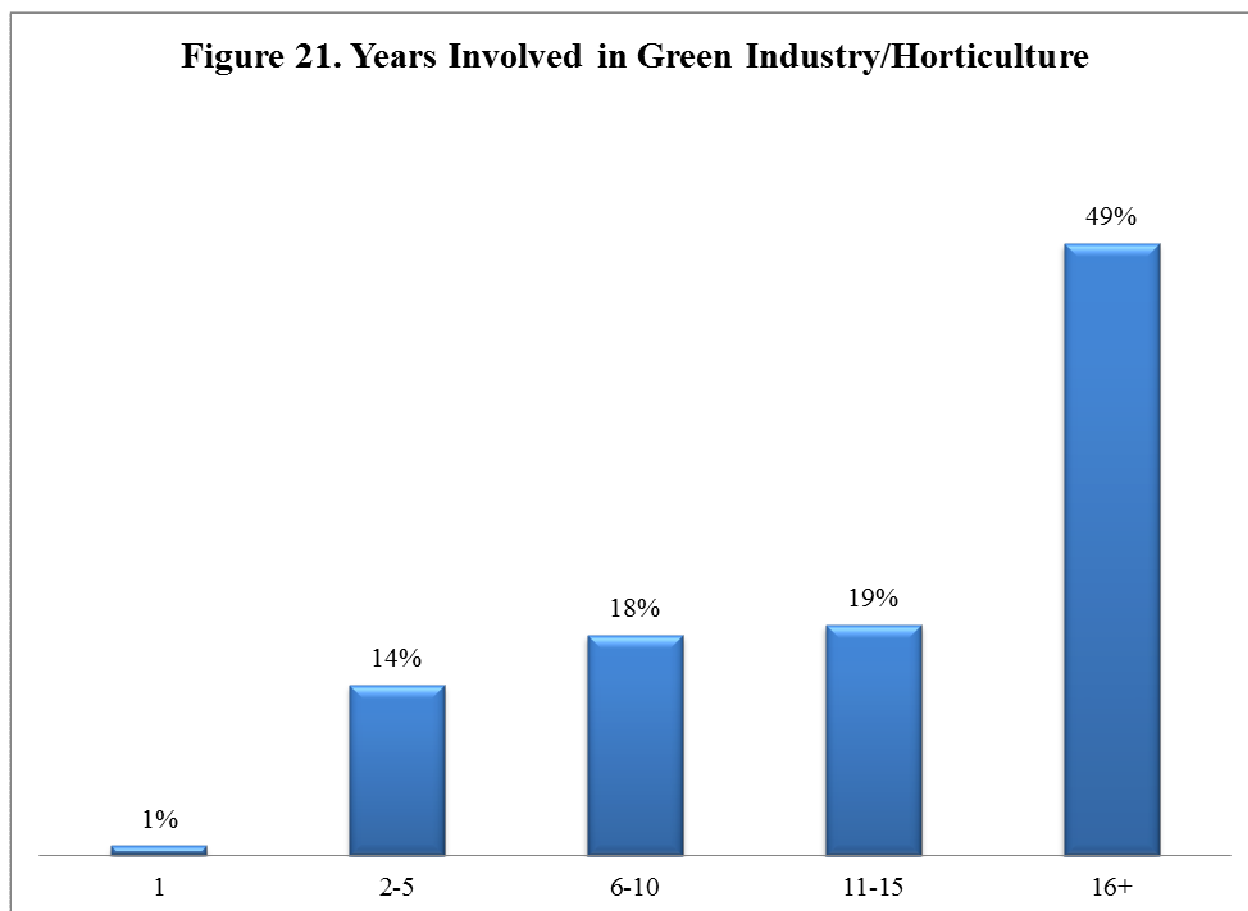
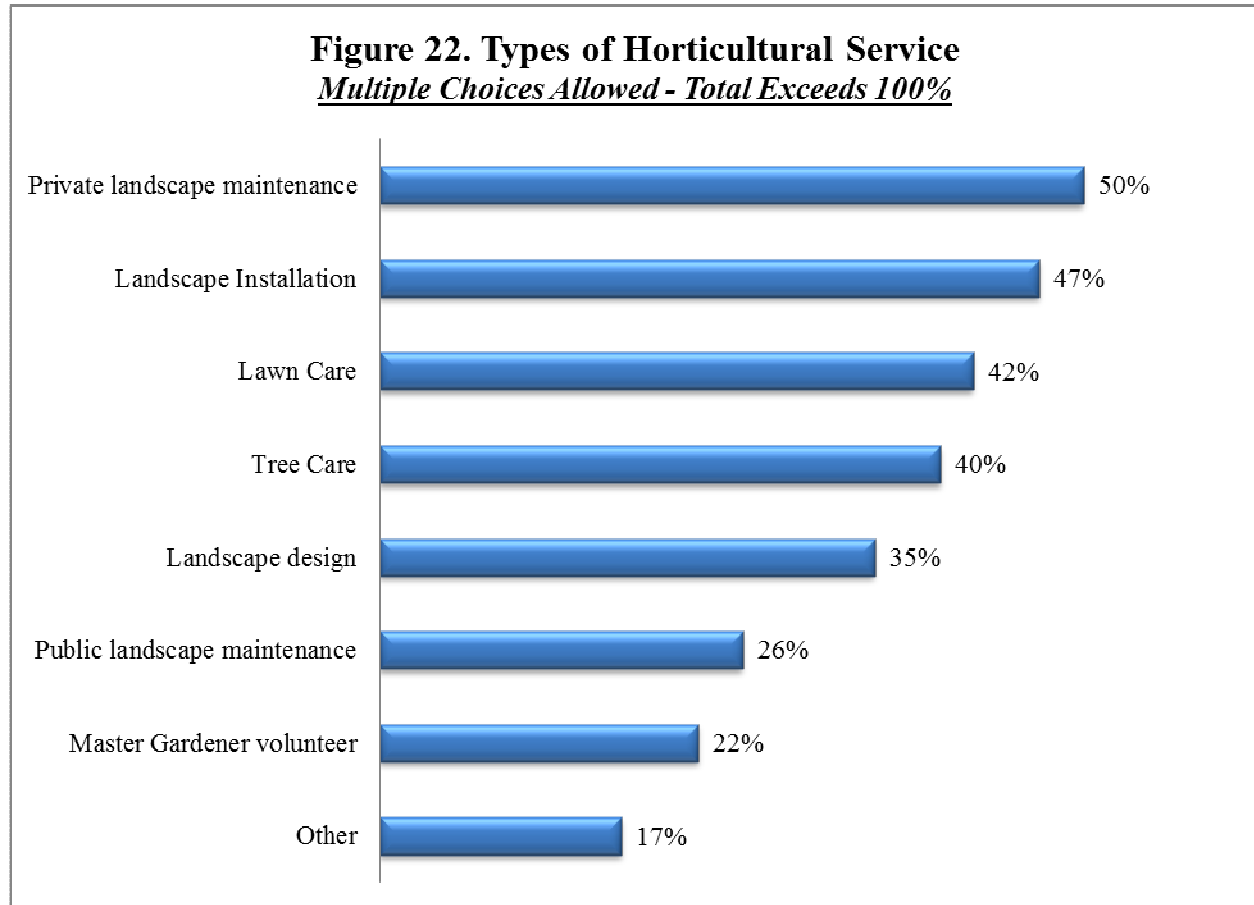


Figure 21 indicates that the short course attracts participants with significant experience, with half saying they have been in the green industry/horticulture for at least 16 years. An additional 19 percent have 11 to 15 years of experience.



Respondents were asked the type of horticultural services in which they are involved. The results are shown in Figure 22. Respondents could choose as many categories as applicable, and, thus, the totals exceed 100 percent. The most commonly indicated services were private landscape maintenance (50 percent) and landscape installation (47 percent). Lawn care and tree care were in a virtual tie, with 42 percent and 40 percent respectively. About a third of respondents said they provided design services, and a quarter are public employees performing landscape maintenance.



Written Comments

At the end of the overall evaluation questionnaire respondents were asked if they had any comments, recommendations for improvement, or requests for future speakers or topics. Written comments were received from 45 participants. The SRC transcribed the comments and divided their content into 6 categories plus a miscellaneous group and a category with comments pertaining to the questionnaire design. Some respondents' responses contained more than one topic and were split into additional categories as needed, resulting in 56 comments.

The results are shown in Table 10. The complete list of responses is included in Appendix A.

Table 10. Comments by Category		
Topic	Count	Percent
Course topics and content	17	30%
General positive comments	16	29%
Facilities and amenities	9	16%
Speakers	6	11%
Course materials	2	3%
Program delivery options	2	3%
Miscellaneous	2	3%
Questionnaire design	2	3%

There were 17 comments about the current topics and content of the short course and suggestions for future topics to include. The following quotes are representative of this group of comments:

“Weed control options, compost utilization, fertilizers, vegetables bulbs? Possibilities.

“A topic leader dealing with natural pollinator like Mason and Bumble bees. Especially show how individuals can help propagate these natural pollinators.”

A second group of 16 responses contained general positive comments about the short course. The following quotes are representative of this group of comments:

“Another great program.”

“Wonderful course.”

Conclusions

The results of the evaluations of the individual sessions and the overall evaluation indicate that the 2013 Landscape and Grounds Maintenance short course was very successful.

Respondents report substantial gains in knowledge as a result of the sessions they attended. If averaged across all topics in the short course, 34 percent of respondents said their knowledge before the course was excellent or good, whereas 86 percent rated their knowledge level after the course as good or excellent.

Very favorable written comments and a high likelihood among respondents to attend future UW-Extension horticultural short course offerings provide additional evidence of success of this short course. The high proportion of repeat attendees lends additional credence to the high level of satisfaction among participants with the short course.

Appendix A – Written Responses

5. What horticultural service(s) are you involved with? (27 Responses)

- Home owner – gardener (2x)
- Retail garden center (2x)
- Aquatic
- Botanical Gardens
- Caretaker on Private Estate
- Commercial Landscape Maintenance
- Elevation
- Garden Center
- Garden center - retail customers
- Garden center sales
- Golf course maintenance
- Government regulation
- Greenhouse
- Home owner
- IPM and perennial animals
- Landscape Design
- Landscape renovation
- Nursery Growth
- Nursery retail sales
- Restoration/landscape
- Retail sales
- Snow, Irrigation, Interiorscape.
- Specialty Spraying of orchards and greenhouses
- Teaching
- U.W. Gardener

7. Comments, recommendations for improvement, or requests for future speakers or topics (45 responses)

Short course topics and content (17 comments)

- A topic leader dealing with natural pollinator like Mason and Bumble bees. Especially show how individuals can help propagate these natural pollinators.
- Anything involving PHC on trees/shrubs/turf would be great.
- As a horticulturist, these classes help me keep skillset current.
- Can the classes be "grouped" by profession more closely, i.e. by booking tree care speakers, day, horticulturalists another, landscaping, etc. Otherwise, an excellent program.
- Good variety of topics.
- Have another one during summer so we can go look at examples of plants, turf problems, etc.
- I do tree care - so I was a bit overwhelmed by some of the intense details of the plants.

- Invasive species control (timing) spray, cut and treat (girdle)? Buckthorn, Honeysuckle, and Garlic Mustard
- I would benefit from a "scientific name" identification course in the future.
- More time on topics, increase class time. Doing a great job, thank you!
- I thought dealing with drought & turf repair was very timely and provided a wealth of information. I know that some of the speakers feel they were presenting the same information each year, but it is good to hear from an expert and from a lot of people this is the first and only time they get to hear the UW-extension experts speak. Thank you very much.
- Sustainable landscapes.
- There is always a lot of valuable info at these courses.
- These women have done and continue to do a wonderful job bringing us valuable education every year after year! I know for a fact this is the only education that many people in this area, in the industry get. It is very reasonably priced, especially considering the quality of speakers and subject matter they come up with. I was very happy that the women (Barb and Patti) when faced with budget cuts, went out and solicited funding to continue the donuts. I am not suggesting that fees go up and/or that the horticulturist should have to find their own funding. I just want you (Mr. and or Mrs. Boss) to know what a great job these women do bringing us a great program.
- This is hugely valuable to the industry. This is an opportunity to have direct contact with UW expertise and personnel. We all need updating over the course of a career in the industry. Timing is great because it is just prior to the start of the season. It also provides networking opportunities.
- University updates insects/diseases/plant material always beneficial. Dr. Soldeats, plant metabolism discussion was very useful.
- Weed control options, compost utilization, fertilizers, vegetables bulbs? Possibilities.

General positive/complimentary comments (16 comments)

- Always an excellent program. Important topics and excellent speakers. I look forward to it every year. Good value too.
- Another great program.
- Fantastic! Keep up the great work!
- Great conference.
- Great program.
- I always enjoy this.
- I enjoyed the course, will be willing to sign up for another. I apologize for not attending the class on Wednesday, but with the snow I was working. Again I thank you for the information classes.
- Keep up the excellent work.
- Thanks.
- Thanks for a nice, job have a great year.
- Thank you for calling to let me know of the postponement and rescheduling of today's course.
- Usually very well done!
- Very interesting and am glad I attended all 4 sessions and look forward to next year.
- What a value for the money! Learned a lot! Great refreshments!
- Wonderful course.

- You do a good job.

Facilities and amenities (9 comments)

- Charge \$2.00 to \$5.00 each applicant and provide better snack and beverage options.
- Close doors. Raise screen.
- Tables are nice to write notes and put class materials on.
- I like the Petzer location option, compared to Boerner.
- Like the coffee. The staff is very friendly.
- I love the location and facilities from my house (Lake Geneva) see you next year!
- Tables would be awesome.
- The location of the facility is good. The time of year is good. Although I always seem to miss a couple sessions due to weather or commitments that come up through work. I was able to get a copy of Doug's presentation.
- Times are great.

Speakers (6 comments)

- Enjoyed the engaging speakers.
- Excellent choice of speakers as well as timely topics! Excellent speakers. Spoke to the industry, not dumbed down. Great bang for the buck.
- Don't let Phil retire-Phil Pelliteri!-don't let him leave!
- Please try to get the University of MN insert expert next year-he spoke at the organic gardening conference this year (sorry I can't remember this name, but he was excellent). Am tired of Chris Williamson?? Ego
- This was my first year. All very good knowledgeable speakers. Thought their session had excellent speakers.
- Very good speakers. Informative. Knows their area.

Course materials (2 comments)

- Color handouts or links to presentations for color pictures.
- Would love access to handouts before sessions for review and questions. Could be a link product on UW-Extension site or specifically emailed to registrants.

Program delivery options (2 comments)

- Patti RE: Cost Effectiveness. Have the possibilities of remote/satellite broadcasting been explored-MATC has this capability-speaker at one location but could be broadcast to Madison/Milwaukee/Waukesha/Kenosha/Sheboygan/Green Bay locations. Or webinars whether participation is live or often the fact (for those who glow snow). I prefer live format (as I am an aging participant) but as younger generations come on board that may be the only way it is accepted. By joining up dreads in the state, it might also broaden everyone's perspective-some training may be locally focused (Green Bay's Advisors) but other offerings are really industry-wide in scope and need for the information.
- Maybe online or a combination of class and online. I don't know how to study this. Please continue to after this course.

Miscellaneous (2 comments)

- #6 is misleading. I spent 2 years in the Rutgers Turf Management program. If I exclude that the grade is much higher.
- I like the arborist CEU's that are available.

Evaluation Questionnaire design (2 comments)

- On evaluation forms switch "after the program" and "Before the program" - they are in the wrong order - too easy to put "before" answers in the wrong place.
- On weekly sheets put the before program on left side, after on right.

Appendix B – Quantitative Summary of Responses by Question

Week 1

Brian Hudelson Workshop Evaluation. “Annual and Perennials Disease Management”

How would you rate your knowledge with respect to the following?

After the Program				Annual and Perennials Disease	Before the Program			
Poor	Fair	Good	Excellent		Poor	Fair	Good	Excellent
0%	26%	59%	15%	1. Ability to diagnose annual and perennial diseases	30%	45%	22%	3%
1%	15%	66%	18%	2. Causes of annual and perennial diseases	23%	45%	28%	4%
1%	14%	65%	21%	3. Control of annual and perennial diseases	26%	45%	26%	3%

Phil Pellitteri Workshop Evaluation. “Insect Activity and the Weather”

How would you rate your knowledge with respect to the following?

After the Program				Insect Activity and Weather	Before the Program			
Poor	Fair	Good	Excellent		Poor	Fair	Good	Excellent
0%	14%	66%	20%	4. Identify potential drought-related insect damage to plants	22%	49%	27%	3%
1%	13%	61%	25%	5. Spring weather patterns and insects	25%	42%	29%	4%
2%	28%	51%	19%	6. Identifying non-native, invasive insects	36%	39%	20%	4%

7. How many other horticulturists/co-workers will you share this information with?

0	1	2	3	4	5	6+
4%	13%	25%	23%	8%	8%	20%

8. How many clients will you share this information with?

NA	1-24	25-49	50-99	100-149	150-249	250-499	500+
29%	41%	10%	10%	4%	2%	1%	3%

Week 2

Doug Soldat Workshop Evaluation. “Minimizing and Repairing Drought Damage in Lawns”

How would you rate your knowledge with respect to the following?

After the Program				Drought Damaged Lawns	Before the Program			
Poor	Fair	Good	Excellent		Poor	Fair	Good	Excellent
1%	12%	56%	31%	1. Drought tolerance of different grasses	27%	44%	23%	5%
0%	10%	57%	33%	2. Turf care during droughts	11%	51%	34%	5%
0%	10%	56%	34%	3. Repairing drought-stressed lawns	17%	42%	34%	6%

Chris Williamson Workshop Evaluation. “Diagnosis and Management of Important Turfgrass Insects and the Latest on Emerald Ash Borer Management”

How would you rate your knowledge with respect to the following?

After the Program				Diagnosing/Managing Insects	Before the Program			
Poor	Fair	Good	Excellent		Poor	Fair	Good	Excellent
1%	15%	59%	26%	4. Ability to diagnose turfgrass insect pests	31%	40%	25%	4%
0%	18%	53%	29%	5. Effectively manage turfgrass pests	28%	41%	25%	6%
1%	14%	52%	33%	6. Effectively manage emerald ash borer	34%	31%	28%	8%

7. How many other horticulturists/co-workers will you share this information with?

0	1	2	3	4	5	6+
6%	11%	25%	24%	10%	7%	17%

8. How many clients will you share this information with?

NA	1-24	25-49	50-99	100-149	150-249	250-499	500+
42%	14%	7%	5%	1%	1%	3%	25%

Week 3

Jim Ault Workshop Evaluation. “Developing Native Plants for Midwestern Landscape Use: Chicagoland Grows Plant Introduction Program”

How would you rate your knowledge with respect to the following?

After the Program				Using Native Plants	Before the Program			
Poor	Fair	Good	Excellent		Poor	Fair	Good	Excellent
1%	12%	56%	31%	1. Understand the ecology of a garden plant's original habitat	17%	43%	35%	5%
0%	12%	52%	36%	2. How a plant's origins influences its landscape adaptability	16%	42%	35%	6%
1%	12%	53%	34%	3. Ability to group plants with similar environmental needs in your landscapes	14%	38%	37%	10%

Laura Jull Workshop Evaluation. “Don't Get Caught with Your Plants Down: Abiotic Disorders affecting Trees and Shrubs including Imprelis Damage”

How would you rate your knowledge with respect to the following?

After the Program				Abiotic Disorders	Before the Program			
Poor	Fair	Good	Excellent		Poor	Fair	Good	Excellent
0%	13%	61%	27%	4. Ability to recognize Imprelis injury on woody ornamentals	40%	30%	24%	6%
1%	12%	63%	24%	5. How to prevent herbicide damage in plants with Imprelis injury	45%	29%	23%	3%
0%	8%	59%	33%	6. How to protect plants from abiotic disorders	22%	34%	39%	5%

7. How many other horticulturists/co-workers will you share this information with?

0	1	2	3	4	5	6+
6%	17%	25%	19%	8%	6%	19%

8. How many clients will you share this information with?

NA	1-24	25-49	50-99	100-149	150-249	250-499	500+
49%	9%	5%	4%	1%	3%	3%	25%

Week 4

Jim Nau Workshop Evaluation. “New Herbaceous Plants to Use Now”

How would you rate your knowledge with respect to the following?

After the Program				New Herbaceous Plants	Before the Program			
Poor	Fair	Good	Excellent		Poor	Fair	Good	Excellent
2%	13%	57%	28%	1. Herbaceous plant varieties new in 2013	48%	33%	15%	4%
1%	21%	54%	24%	2. Correct placement and care of new herbaceous plant varieties	26%	45%	25%	3%
4%	20%	53%	22%	3. Goals of Ball Horticultural regarding future plant introductions	54%	32%	10%	3%

Dave Wanniger Workshop Evaluation. “Carpet of Beauty or Carpet of Weeds? Groundcovers, Mulches, Plants and Prep for a Lower Maintenance Landscape”

How would you rate your knowledge with respect to the following?

After the Program				Low Maintenance Landscapes	Before the Program			
Poor	Fair	Good	Excellent		Poor	Fair	Good	Excellent
0%	3%	55%	42%	4. Selecting groundcover plants and their proper spacing	9%	39%	45%	8%
1%	1%	49%	48%	5. Bed preparation techniques and practices	6%	37%	46%	12%
0%	5%	47%	47%	6. Selecting right mulch and chemical control	11%	43%	35%	11%

7. How many other horticulturists/co-workers will you share this information with?

0	1	2	3	4	5	6+
8%	16%	19%	17%	12%	8%	20%

8. How many clients will you share this information with?

NA	1-24	25-49	50-99	100-149	150-249	250-499	500+
45%	10%	2%	6%	3%	2%	2%	28%

Please fill out this form and return it to the front desk on your last day of attendance

1. How likely are you to attend future horticultural workshops offered by UW- Extension?

Very Unlikely	Unlikely	No Opinion	Likely	Very Likely
5%	0%	1%	26%	68%

2. Including this year's workshop, approximately how many UWEX UW-Extension Grounds Maintenance Short Courses have you attended over the years?

1	2 – 5	6 - 10	11 – 15	16+
14%	31%	25%	8%	22%

3. Approximately how many years have you been involved in the green industry/horticulture?

1	2 – 5	6 - 10	11 – 15	16+
1%	13%	17%	19%	50%

4. To what extent do you agree about the registration process and fee:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. Method to register was easily navigated	56%	30%	12%	0%	2%
b. Course fees are reasonable	56%	37%	5%	0%	2%

5. What horticultural service(s) are you involved with? (Mark all that apply)

51% Private landscape maintenance 40% Tree care 42% Lawn Care
 25% Public landscape maintenance 37% Landscape design 48% Landscape installation
 22% Master Gardener volunteer 17% Other See Appendix A

6. Compared to other providers of landscape and ground maintenance education that you have used, how would you rate the value of this short course?

Much Lower	Lower	About the Same	Higher	Much Higher	NA
0%	1%	16%	48%	24%	11%

7. Use the space below to enter comments, recommendations for improvement, or requests for future speakers or topics.

See Appendix A