Extension Education Methods

Effectiveness and Audience Analysis of University of Minnesota Extension's Electronic Yard and Garden Newsletter

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SUMMARY. An online survey of readers of the University of Minnesota Extension's electronic Yard & Garden Newsletter (Y&G News) revealed significant differences between respondents on the basis of current employment and Master Gardener affiliation. Fifty-three percent of the respondents were general public (GP); 31% were Master Gardener trained (MGT), followed by full-time horticultural employees (FTE) and part-time horticultural employees (PTE), each of whom made up to 8% of the 500 readers who responded to the survey. Overall, respondents indicated a high level of satisfaction with the newsletter (4.8 out of 5.0), and 81% indicated that the newsletter had provided them with "specific information that they found extremely valuable" in the past 2 years. PTE and MGT respondents rated the newsletter as significantly more useful than did the GP. FTE placed greatest value on timely information related to pest control. GP subscribers indicated that annuals and perennials were the horticultural topics they were most interested in for future issues. All subscribers highly value the newsletter for its usefulness and timeliness and indicated that the newsletter improved their ability to make horticultural decisions. Ninety-nine percent would recommend the newsletter to a friend. The mission of the Y&G News and content changes based on survey responses and available resources are discussed.

Newsletters are economically efficient and an effective way of communicating gardening and other information to a broad range

of audiences (Coffin, 2007; Garton et al., 2003; Kerrigan, 1993; Lutz et al., 1999; Martinson et al., 2010; Stone and Chatfield, 2004). Although traditionally published via direct mailing, most newsletters today are published on the web because of high printing and direct mailing costs (Coffin, 2007; Kerrigan, 1993; Stone and Chatfield, 2004). Many electronic newsletters are freely accessible (often those that are university-sponsored), while others (often plant society and industry organization-sponsored) are password protected or are emailed directly to members as attachments.

Depending on the audience, mission, and method of financing the newsletter, different newsletter production and access models exist.

Developed in 1999 and originally delivered by hard copies to garden centers for public distribution, the University of Minnesota Extension's Y&G News today is published electronically twice per month during the growing season (May–September) and monthly otherwise (October–March). The free Y&G News is available on the university's website to anyone interested in gardening (University of Minnesota, 2011a): the GP, Master Gardeners (MGs), and commercial horticulturists. Although anyone can go online and access the Y&G News, a subscription service has been established where subscribers receive an e-mail reminder announcing that a new issue is posted. The e-mail includes highlights of the articles and a link to easily access the issue. Additionally, all past newsletters are archived, searchable, and available online.

The ongoing mission of the newsletter has been to provide regionally pertinent information that is research-based, timely, and readily accessible. An additional objective has been to use the newsletter as a visible, engaging tool to connect the public with other University of Minnesota Extension horticulture resources. Such resources include the core online horticulture publications and online diagnostic tools (disease, insect, and weed identification), all of which can easily be navigated to from the newsletter. The newsletter serves as one of the extension's key recurring horticultural gateways to connect with the public. It enhances the visibility of extension and helps to convey the value and justify the continued existence of our programs. Resources that help us communicate university impact in the lives of citizens are especially important during the current environment of decreasing extension budgets.

The overall look and format of the newsletter has changed over time as software has evolved, and different authors and editors have participated in the newsletter. The newsletter consists of original articles written primarily by a core group of horticulture Extension Educators. Guest authors (e.g., university faculty, students, and staff; industry members; and MGs) are also actively sought to expand the

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topic range and highlight University of Minnesota and other regional resources and topics of interest.

From 2007 to 2009, the monthly newsletters (posted at the beginning of each month) consisted of a lead photo depicting a horticultural oddity with a brief description, about five articles, and concluded with a list of gardening activities appropriate for that month. Article length was about 500–1500 words and typically contained multiple photographs. Out of the five articles, there was at least one related to each: plant pathology, entomology, and ornamental plants. During the growing season, each issue also contained an article on turfgrass. These base topic areas were due to perceived audience interest and educator expertise. During the growing season, the midmonth issues consisted of typically three or four articles that focused on timely plant materials, gardening chores, and pests. Each issue had a table of contents at the top of the continuous publication with the article title hyperlinked to the corresponding article below for readers' convenience. The editor worked closely with an employee responsible for the extension website to generate and post each newsletter issue in html. By May 2009, 2636 subscribers were receiving e-mail notification of the posting of new Y&G News issues. Because subscribers provided only their e-mail address, there was a limited understanding of who our audience was, their interests, and the impact we were having on them. Feedback has been limited, but generally very positive (direct contact of readers with authors either in person at extension programs or e-mail). Extension peers have seen value in the Y&G News as it has earned the 2008 Minnesota Team Newsletter Communications Award from the National Association of County Agriculture Agents. Additional feedback has included requests to reprint Y&G News articles in national and international publications such as *The Prairie Garden Annual*, *Grower Talks Magazine*, and various gardening blogs.

Understanding the needs of the target audience often determines the effectiveness of a newsletter (Reisbeck, 1980). Applicable, concise, easy to understand content, along with unbiased, timely information and ease of access have all been documented

as critical characteristics for a successful newsletter (Coffin, 2007; Kerrigan, 1993; Reisbeck, 1980; Stone and Chatfield, 2004). Stone and Chatfield's (2004) evaluation of The Ohio State University Extension Buckeye Yard & Garden Line (BYGL), a newsletter targeted slightly more toward the commercial horticulturist than the Y&G News, demonstrated both newsletter outcomes and impacts. For instance, the majority of the respondents agreed that the newsletter involved positive behavioral changes in horticultural and pest management practices as well as improved customer service. The BYGL demonstrated impact by showing that 63% of users said that the BYGL saved their company money or increased their net profit. Sixty-six percent reported financial gains from proper selection or reduction of pesticides and improved customer service. Coffin (2007) reported that a majority of respondents had an increased knowledge of plant pests and garden soils, an increased ability to choose resistant varieties, use least-toxic pest control methods, and an increased confidence in gardening know-how and success with flower beds.

The Y&G News has been a high-priority program by the University of Minnesota Extension horticulture team and requires considerable resources to coordinate, write, and post. With declining budgets, fewer horticulture Extension Educators, and a greater urgency than ever to document outcomes and impacts, it is essential to understand the audience of the Y&G News, their needs, and the effectiveness of the Y&G News at meeting those needs. Such knowledge would allow for informed decisions to best retain and expand impacts important to extension, explore affordable and creative alternatives to current newsletter methodology, and build upon the past success of the Y&G News. Therefore, we conducted an online survey of Y&G News readers to 1) determine reader demographics, 2) evaluate if the newsletter format and content was meeting horticultural needs of readers, 3) determine the impact of the newsletter on horticultural behavior, 4) determine if readers are using the newsletter as a gateway to other university online gardening resources, and 5) solicit suggestions for changes to improve the newsletter.

Materials and methods

A 47 question survey was developed through SurveyMonkeyTM software (Portland, OR) and reviewed internally for content and syntax by the University of Minnesota Extension Horticulture Working Group and evaluation specialists (supplemental material available online from ASHS with the electronic version of this HortTechnology article). The questions were divided into themed sections: patterns of how readers access the newsletter, reader access of other University of Minnesota Extension gardening web resources, opinions on newsletter format, topic interests of readers, reader demographics, and final comments. Both close-ended and open-ended questions were used. Because the research involved human subjects, the survey needed to be presented to the Institutional Review Board (IRB) at the University of Minnesota. The survey was declared exempt from review by the IRB committee. The survey was initially tested for validity with ≈ 25 MGs. Following this an invitation for participation in the survey was sent to all 2636 subscribers via e-mail in conjunction with the announcement of posting of the June 2009 Y&G News issue as well as simultaneously placed as the leading article directly within that issue. Participants responded over a 2-week period from 4 to 17 June 2009. As an incentive and thanks, participants who completed the survey were provided with an electronic, printable coupon for a buy one get one free admission to the University of Minnesota Landscape Arboretum valid through 12 July 2009.

Responses to selected questions, based on demographic group, were analyzed using ANOVA and Bonferroni for mean separation at $P \leq 0.05$ using SPSS (version 11; SPSS, Chicago, IL). Significance was tested for the following categories: 1) usefulness of the newsletter, 2) an improved ability to make horticultural decisions, 3) the newsletter as a trustworthy source of information, 4) the degree to which the newsletter had changed horticultural practices, and 5) horticultural topic preferences.

Results

Five hundred people or about 19% of the subscribers completed the survey. Interestingly, about 5% of the

respondents encountered the invitation to participate in the survey directly from the newsletter and indicated that they do not subscribe to the e-mail reminders. Analysis of the subscribers revealed four key demographic groups: GP [$n = 265$ (53%)], MGT [$n = 155$ (31%)], full-time horticultural employees [$n = 42$ (8%)], and part-time horticultural employees [$n = 38$ (8%)]. There was some overlap between groups: 27% (11 out of 42 respondents) of the FTE group were MGT and 65% (25 of 38 respondents) of the PTE respondents were MGT. The responses of the overlapping individuals were placed within and analyzed by their employment category. The most frequent method that readers of all groups first learned about the Y&G News was through the University of Minnesota Extension website and the least frequent method was garden centers (Table 1).

DEMOGRAPHICS. PTE and MGT were 87% female, 13% male and 84% female, 16% male, respectively. The GP group was 75% female and 25% male, while the FTE group was 62% female and 38% male. The percentage of respondents <50 years of age is 17% MGT, 26% PTE, 42% GP, and 43% FTE. For all respondent groups, the most represented age category was 50 to 59 years followed by 60 to 69 years for MGT, PTE, and GP (Fig. 1). Ninety-two percent of the MGT and GP reside in Minnesota while 83% of the FTE and 79% of the PTE live in Minnesota.

The majority of participants in all demographic groups are long-term gardeners reporting more than 10 years of gardening experience (Table 2). The percentage of respondents who ranked themselves (via self-selection) as advanced gardeners was highest among the FTE (88%) and lowest among the

GP (23%) (Table 2). FTE respondents had the highest rate (71%) of respondents completing post-secondary training in horticulture or a related discipline and PTE was a distant second (24%) (Table 2).

USEFULNESS AND VALUE OF Y&G NEWS. Participants as a whole rated the Y&G News as very useful: 4.1 on a 5-point scale, where 5 is extremely useful (Table 3). MGT and PTE ranked the newsletter significantly more useful than did the GP. Ninety-nine percent of respondents would recommend the Y&G News to a friend (Table 3). MGT responses were significantly different from FTE and GP in how helpful the newsletter was for making horticultural decisions and their trust in the newsletter (Table 3).

Reliable, research-based information ranked as the most valued attribute of the newsletter by all audience groups, followed by timely information on gardening topics, information on pest problems, and new trends in gardening (Table 4). Answers to an open-ended question asking readers what they liked most about the newsletter paralleled many of the attributes listed in the close-ended question of what they most valued (Table 4). Timeliness was the most frequently cited attribute that readers liked most about the Y&G News. Other frequently listed attributes included quality and applicability of information, expert authors, region-specific information, and written in a way that is easily understood and at the right level of detail.

Fig. 1. University of Minnesota Extension's Yard & Garden News reader age distribution partitioned by audience category: full-time horticultural employees (FTE) and part-time horticultural employees (PTE), Master Gardener trained (MGT), and the general public (GP).

Table 1. Source by which readers of the University of Minnesota (UMN) Extension's Yard & Garden News (Y&G News) first learned about the Y&G News, partitioned by audience category.

Source	Proportion of readers (%)				
	Full-time employees	Part-time employees	Master Gardener trained	General public	All respondents
Friend	16.7	5.3	2.6	10.2	8.2
UMN Extension website	47.6	50.0	28.4	61.5	49.0
UMN Extension event	4.8	15.8	32.3	3.8	13.5
Referral from Master Gardener or extension employee	7.1	10.5	14.2	5.7	8.7
Garden center	0	0	0	2.6	1.3
Other	23.8	18.4	22.6	16.2	19.3

Table 2. Gardening experience and post secondary education in horticulture or related discipline of University of Minnesota Extension's Yard & Garden News readers partitioned by audience category.

Experience and education topics	Proportion of readers (%)				
	Full-time employees	Part-time employees	Master Gardener trained	General public	All respondents
Advanced gardeners ^z	88.1	65.8	56.1	22.6	41.8
Gardening for >10 years	81.0	89.5	92.3	65.3	76.8
Completed post-secondary degree in horticulture or closely related discipline	71.4	23.7	5.8	4.9	12.2

^zRespondents ranked themselves as beginning, intermediate, or advanced gardeners.

Table 3. University of Minnesota Extension's Yard & Garden News (Y&G News) reader responses to questions, partitioned by audience category, that address how readers value the usefulness, application, trustworthiness, and overall satisfaction of the Y&G News.

Topic	Full-time employees	Part-time employees	Master Gardener trained	General public	All respondents ^z
Usefulness of information (1–5 scale) ^y	4.1 ab ^x	4.2 a	4.3 a	4.0 b	4.1
Improved ability to make decisions (1–4 scale) ^w	3.3 b	3.3 ab	3.5 a	3.3 b	3.4
Relative trustworthiness of the Y&G News compared with other periodicals (1–3 scale) ^v	2.6 b	2.7 ab	2.8 a	2.7 b	2.7
Overall satisfaction with the Y&G News (1–5 scale) ^u	4.8 ^z	4.8	4.9	4.7	4.8
Readers that would recommend the Y&G News to a friend (%)	100.0 ^z	100.0	98.6	99.2	99.2

^zNo statistical analysis performed.

^y1 = not useful, 2 = slightly useful, 3 = somewhat useful, 4 = quite useful, 5 = extremely useful.

^wValues within a row followed by a different letter are significantly different at $P \leq 0.05$ using Bonferroni.

^v1 = no improvement, 2 = little improvement, 3 = some improvement, 4 = much improvement.

^u1 = less trustworthy, 2 = similarly trustworthy, 3 = more trustworthy.

^z1 = very unsatisfied, 2 = unsatisfied, 3 = neutral, 4 = satisfied, 5 = very satisfied.

Table 4. University of Minnesota Extension's Yard & Garden News (Y&G News) reader responses, partitioned by audience category, for what they valued most about the information in the Y&G News.

Response categories ^z	Proportion of readers (%)				
	Full-time employees	Part-time employees	Master Gardener trained	General public	All respondents
Reliable, research-based information	71.4	81.6	87.7	81.9	82.4
Timely information on gardening topics	64.3	63.2	72.9	74.0	71.8
Information on pest problems	47.6	36.8	32.9	25.3	30.2
Information on new trends in gardening	11.9	21.1	14.8	18.9	17.6
Other	0	0	0.6	3.4	2.0

^zRespondents were asked to select up to two choices.

Eighty-one percent of all respondents agreed that the Y&G News had provided them with specific information they had found to be extremely valuable in the past 2 years, with the following percentages: 92% PTE, 87% MGT, 81% FTE, and 75% GP. Participants who found information of extreme value from the Y&G News were asked to provide that information and describe why it was valuable. Their examples were summarized into topic categories (it was possible for an example to represent more than one topic category) and are presented in Table 5. Pest control was the most

Table 5. Percentage of University of Minnesota Extension's Yard & Garden News (Y&G News) readers, partitioned by audience category, indicating specific information from the Y&G News under the listed topic category was of extreme value to them during the past 2 years.

Topic	Proportion of readers (%)			
	Full-time employees	Part-time employees	Master Gardener trained	General public
Pest control	74	62	70	50
General plant care	32	38	27	4
Plant selection	19	23	15	10
Timely gardening activities	13	12	4	14
Lawn care	6	8	14	18
General plant care	3	0	5	12
Minnesota-specific information	0	4	1	11

frequently cited topic in all demographic categories. General gardening information was the second most frequently cited topic by all groups except the GP, who cited lawn care as a distant second.

Readers were asked to compare the usefulness of the Y&G News to other widely known periodicals available in the region that offer gardening information. The range of the Y&G News readers using any particular listed periodical ranged from 31% to 55% (Table 6). Out of the respondents using any particular resource, the Y&G News was most frequently rated as more useful. The key exception is that most readers using both the Y&G News and Northern Gardener Magazine rated the usefulness of these resources as comparable. Generally, the magazines were rated as being more useful for gardening information than the newspapers. When asked to compare the value of the Y&G News to other online gardening periodicals, 68.9% responded that the Y&G News was the only online gardening periodical they used.

NEWSLETTER VIEWING PATTERNS. Sixty-five percent of participants

reported they opened every newsletter, while 86% reported they opened all or most of the newsletters, regardless of the season. The average number of FTE respondents who read at least one complete article was 67%, with other groups as follows: 60% MGT, 58% PTE, and 51% GP. When asked how many total articles they read, 45% PTE and 37% of the MGT groups read the whole newsletter, while only 14% GP and 12% FTE read the entire newsletter.

Ninety-eight percent of respondents found the additional summer midmonth issues of the newsletter to be valuable. Eighty-nine percent of respondents thought the newsletter was issued at the right frequency; 94% thought the length was correct and at the right technical level.

Sixty-nine percent of the participants reported that they had searched the archives of past newsletters at least once in the past year. Thirty-two percent of PTE respondents had visited the archives more than four times in the past year, with 30% MGT, 24% FTE, and 13% GP. Fifty-eight percent and 29% of respondents found the presence of a hyperlinked table of

contents allowing one to jump to a specific article to be very useful and somewhat useful, respectively; 75% indicated the e-mail reminder of a new issue was very useful. Ninety percent of the participants reported that they had accessed other university online gardening resources. Twenty-six percent reported having accessed these resources more than 10 times in the past year, with 48% MGT, 45% PTE, 31% FTE, and 11% GP. It is evident that most respondents accessed the Y&G News more often in the past year than other University of Minnesota Extension online gardening resources.

IMPACT OR OUTCOME OF THE Y&G NEWS. Respondents indicated that based on information in the newsletter, they changed their practices in the areas of pest control, plant selection, flowers (annuals and perennials), tree and shrub care, and landscape design (Table 7). The greatest change was in the area of pest control where the PTE and MGT indicated significantly more changes than did the GP. This is consistent with the most frequently cited topic for information that readers found to be extremely valuable to them during the past 2

Table 6. University of Minnesota Extension's Yard & Garden News (Y&G News) reader responses to the usefulness of the Y&G News relative to selected newspapers and magazines for gardening information.

	Readers using resource (%)	Relative usefulness of Y&G News (% readers) ²		
		Less	Comparable	More
Newspapers				
Minneapolis Star Tribune	55.0	14.9	14.5	70.7
St. Paul Pioneer Press	35.4	13.7	8.0	78.3
Magazines				
Arboretum News	27.8	6.5	36.0	57.6
Horticulture	34.1	11.8	41.8	46.5
Fine Gardening	31.0	9.8	45.1	45.1
Northern Gardener	53.4	7.2	67.0	25.8

²Percent is based out of only those using the listed periodical.

Table 7. University of Minnesota Extension's Yard & Garden News (Y&G News) reader responses, partitioned by audience category, for the degree the Y&G News information led to changes in their gardening practices in the following topics during the past 2 years.

Topic	Changes in gardening practices (1–4 scale) ²				
	Full-time employees	Part-time employees	Master Gardener trained	General public	All respondents
Pest (insect and disease) control	2.9 ab ^y	2.9 a	3.0 a	2.6 b	2.8
Plant selection	2.4 b	2.9 a	2.9 a	2.8 a	2.8
Tree and shrub care	2.6 b	2.9 a	2.8 a	2.6 b	2.8
Flowers (annuals and perennials)	2.2 b	2.7 a	2.7 a	2.6 a	2.6
Lawn care	2.5 a	2.5 a	2.6 a	2.5 a	2.6
Landscape design	1.9 b	2.2 ab	2.4 a	2.2 a	2.3

¹1 = no change, 2 = little change, 3 = some change, 4 = much change.

^yValues within a row followed by the same letter are not significantly different at $P \leq 0.05$ using Bonferroni.

years (Table 5). Significant changes were also indicated for plant selection and flower culture for the PTE, MGT, and GP groups compared with the FTE group. In nearly all categories, MGT indicated the largest behavior changes and was similar to PTE.

CHANGES FOR FUTURE NEWSLETTERS. Few improvements in the Y&G News were suggested. Overall, the readership was satisfied with the newsletter: 77.9% reported being highly satisfied, 20.9% satisfied, 1.2% neutral, and 0% unsatisfied. Twenty-four percent of the participants suggested the newsletter had too few pictures, while only 0.2% of respondents indicated too many pictures. For overall visual layout, 42% rated the visual layout as “okay,” with 57% indicating it was “appealing.”

When asked about specific topics of interest for future newsletters, there was a significant difference in response based on demographics (Table 8). FTE, PTE, and MGT were all significantly more interested in diseases and insects than were the GP. Flowers (annuals and perennials) were the topic of interest for a significantly larger group of GP readers than FTE. MGT and PTE were significantly more interested in environmental stewardship than were the GP. Houseplants were the topic of least interest for all groups (Table 8). The overall interest level in future article topics generally paralleled the areas of gardening readers indicated engaging in. The key exception was that the interest level in native plants was stronger than the extent readers

indicated currently gardening with them.

OPENNESS OF READERS TO OTHER UNIVERSITY GARDENING RESOURCES AND FORMATS. Readers were asked their preference as to the informational format by which they would receive gardening information from the University of Minnesota Extension (Table 9). The highest ranking ones were the diagnostics tools and written publications, currently available resources featured along with the Y&G News under the University of Minnesota gardening information main website (University of Minnesota, 2011b). The lowest ranking formats were blogs, podcasts, and radio programs. With only 3% of the overall readers reporting that the Y&G News is the only format they would like receiving gardening

Table 8. University of Minnesota Extension’s Yard & Garden News reader responses, partitioned by audience category, indicating the degree of interest in future articles on the listed topics.

Topic	Degree of interest in future articles (1–4 scale) ^a				
	Full-time employees	Part-time employees	Master Gardener trained	General public	All respondents
Flowers (annuals and perennials)	3.2 b ^y	3.6 a	3.5 a	3.5 a	3.5
Native plants	3.4 a	3.5 a	3.3 a	3.4 a	3.4
Trees and shrubs	3.6 a	3.5 ab	3.4 ab	3.3 b	3.4
Fruit and vegetables	3.2 a	3.4 a	3.2 a	3.3 a	3.3
Diseases	3.5 a	3.5 a	3.4 ab	2.9 b	3.1
Insects	3.4 a	3.4 a	3.3 a	2.9 b	3.1
Soils	3.3 a	3.3 a	3.1 a	3.0 a	3.1
Environmental stewardship	3.0 ab	3.2 a	3.1 a	2.8 b	3.0
Landscape design	2.9 a	3.1 a	3.0 a	2.9 a	2.9
Lawn care	3.1 a	2.7 a	2.9 a	2.9 a	2.9
Houseplants	2.5 a	2.8 a	2.7 a	2.5 a	2.6

^a1 = not interested, 2 = slightly interested, 3 = interested, 4 = very interested.

^yValues within a row followed by the same letter are not significantly different at $P \leq 0.05$ using Bonferroni.

Table 9. Proportion of University of Minnesota (UMN) Extension’s Yard & Garden News (Y&G News) readers willing to receive gardening information from UMN Extension in the listed delivery formats.

Topic	Proportion of readers (%)				
	Full-time employees	Part-time employees	Master Gardener trained	General public	All respondents
Educational CDs	26.2	39.5	39.4	16.6	26.2
Live seminars	40.5	55.3	66.5	34.3	46.4
Hands-on workshops	45.2	57.9	69.7	39.6	50.8
Blog	28.6	23.7	19.4	26.4	24.2
News releases (local newspapers and radio)	28.6	26.3	41.3	28.7	32.4
Online courses	50.0	60.5	49.0	47.2	49.0
Podcasts	19.0	15.8	11.6	22.6	18.4
Printed fact sheets	50.0	57.9	63.9	49.1	54.4
Radio programs	14.3	28.9	14.8	18.1	17.6
Garden info website diagnostic tools ^a	78.6	94.7	84.5	72.8	78.6
Garden info website written publications	61.9	84.2	72.3	62.6	67.2
Don’t want information any other way besides Y&G News	4.8	0	0.6	4.5	3.0

^aThe garden info website features the Y&G News, diagnostic tools, and written publications (UMN Extension, 2011).

information from the University of Minnesota Extension, there is potential to continue to develop additional communication formats.

Y&G News readers are generally not opposed to having the newsletter serve to connect them with other educational resources and opportunities. Overall, 93.1% reported they would like to see advertisements for attending key regional horticulture-related events continued in the Y&G News (most of which have been extension related). During the past year, 52.8% of people responded they have not visited the University of Minnesota Landscape Arboretum, the destination for the admission coupon used as a thank you for taking the survey and incentive to readers to complete the relatively long survey. Admission records show that only six coupons were redeemed.

Discussion

Y&G News readers are primarily intermediate and advanced gardeners and gardening professionals who highly value the newsletter for its reliable, timely, and trustworthy information (Tables 3 and 4). Partitioning the 500 survey participants into four key demographic groups (FTE, PTE, MGT, and GP) revealed differences in audience needs and preferences. Overall, respondents had few recommendations for change. The Y&G News subscribers ($n = 2636$) represent only a fraction of the gardening community in Minnesota. The opportunity exists to expand readership in all audience segments including the GP, MGs, and professional horticulturists. Expanding the readership provides the opportunity to increase the impact of the Y&G News.

Continuation of the Y&G News is well justified, even in the midst of declining personnel and financial resources. The Y&G News is a resource having demonstrated positive, documented impacts on its readership's gardening decisions through both the close-ended and open-ended survey questions. It is also a trusted, recurring gateway of connecting readers to extension and other university resources. In fact, the majority of respondents accessed the Y&G News more frequently than any other extension online gardening resource.

The Y&G News was compared with other key periodical sources of

gardening information to better understand how the Y&G News compared in usefulness to these other resources and to determine if the Y&G News served a unique niche (Table 6). A strong majority of readers found the Y&G News more useful than the key regional newspapers for gardening information. This may be due to the more general and less sophisticated gardening information presented in the newspapers. Y&G News readers are generally intermediate to advanced gardeners and as such tolerate or demand more in-depth treatment of topics. The gardening magazines fared better in comparison with the Y&G News for usefulness, with *Northern Gardener* being rated as the most comparable. *Northern Gardener* is sponsored by the Minnesota State Horticultural Society (MSHS), an organization established in 1866 and which has a good working relationship with the University of Minnesota. *Northern Gardener* emphasizes regional gardening information, similar to the Y&G News, and has a circulation of about 13,500 (subscriptions and newsstand; six issues per year) (MSHS, 2010), suggesting that there is much room for the freely available Y&G News to grow in subscription number in the midwestern United States. The Y&G News was documented as the only online gardening periodical used by 68.9% of respondents, emphasizing the unique nature of the publication format, which has the benefit of being freely available with archived past issues that are easily searchable and readily available.

PTE and MGT show the highest value and trust for the Y&G News, and those groups (of which there is considerable overlap) should especially be targeted to increase readership. As Y&G News readers from these groups engage the GP on horticultural topics, this audience along with the FTE especially strengthens the university's impact on horticulture in the region. The high level of trust in the Y&G News expressed by the MGT group may reflect the fact that they have personally met, taken classes from, and have partnered on projects with many of the core extension educators authoring the newsletter. Interestingly, MN has over 2000 MGs (Meyer, 2007), many of which do not appear to be reading the Y&G News. This is consistent with a documented trend

of a greater tendency of older audiences not as readily using online resources relative to younger audiences (MGT had the least number of people under 50 years of age at 17%) (Kelley and Wehry, 2006). Having hard copies of the Y&G News available at monthly MG meetings may encourage MGs to embrace online resources and serve to reach a higher percentage of the MGT audience.

Even though the FTE audience represents only 8% of the readership, this professional segment especially valued timeliness and pest control articles. They had the lowest percentage of individuals (12) reading entire newsletters, which may reflect a more selective need for information. More targeted Y&G News articles on pest forecasting or additional pest management resources beyond the newsletter would further meet this group's needs. Greater promotion of the Y&G News and its pest management emphasis to a larger commercial audience, such as the Minnesota Nursery and Landscape Association (MNLA), could increase Y&G News readership and impact.

The GP, although already comprising most of the respondents (53%), has the greatest potential for readership increase due to their overall number. As the Minnesota public seeks gardening information, University of Minnesota Extension resources unfortunately have not placed near the top of where they seek their information (Meyer and Foord, 2008). The topic area of greatest interest to the GP was flowers (annuals and perennials); this group may have a greater tendency to focus on the beneficial outcomes of gardening rather than topics that showcase problems and problem solving such as pests and environmental degradation.

Advertising the Y&G News to the general gardening public during targeted times when they are attuned to or are engaged in gardening activities may be particularly effective. To expand awareness of the newsletter, it has been featured in extension displays at Minnesota county fairs and the state fair, MN MG educational events, and regional industry tradeshow and home and garden shows. Posters, bookmarks, and postcards highlighting the newsletter and website have been developed as marketing tools for these events.

In addition, organizations like MNLA would be a logical partner to

help develop ongoing and effective marketing campaigns for the Y&G News targeted to the GP in retail garden centers and nurseries. The GP is the only audience that reports having first learned about the Y&G News (3%) through garden centers. This may reflect the fact that the newsletter was at first but is no longer distributed as hard copies at Minnesota garden centers.

Overall, the extension website itself was the most frequent means that readers first learned about the Y&G News (Table 1). As expected, the MGT group had the greatest percentage of individuals who first learned about the Y&G News through an extension event, MG, or extension employee. People learning about the newsletter by word of mouth through a friend was also important; it reflects the strong audience satisfaction with the Y&G News, and a 99.2% audience response rate of being willing to recommend the Y&G News to a friend (Table 3). Questions with an "other" category gave respondents the opportunity to write in answers not given as choices in the survey. Other ways in which people encountered the Y&G news were through a general online search on a gardening topic or a non-extension event. Understanding our current audience newsletter needs and preferences will help us better target individual groups for more readers in the future.

The Y&G News has been converted to a blog format after the survey was administered to save money. User-friendly blog software allows the University of Minnesota Extension Horticulture Working Group to be responsible for newsletter formatting and posting. This change was an administrative decision imposed to more efficiently use limited website development expertise. Conversion to a blog occurred even though respondents ranked receiving gardening information via blogs relatively low; blogs ranked ninth out of the eleven communication methods listed, with only 24.2% of people in favor of receiving gardening information by this format (Table 9). As the blog

template was developed, the survey indicated that it was important to preserve as much of the valued formatting style as possible (i.e., retain table of contents, use of multiple pictures per article, similar fonts, etc.). The blog software allows new possibilities that the html format did not (e.g., readers can post feedback on articles, although this feature has not been implemented yet) and also new limitations (e.g., newsletters are no longer able to be archived together as an intact issue).

Continued effort to build partnerships with guest authors can help alleviate a void in articles in the newsletter from the declining core of extension educators. Guest authors can be sought to especially provide articles in topic areas where there is less internal expertise.

In conclusion, by partitioning the respondent audience, we know which parts of the Y&G News appeal most to which audience segment. The timely distribution of the newsletter with information about insect and diseases supports horticultural employees and MGs in their roles as purveyors of educational information. Results show that horticultural employees are the smallest percentage (16%) of current readership. If the newsletter is to be successful to both horticultural professionals and the GP, attention should be given to the interests of each of these groups. Increased promotion of the newsletter to all audience segments while continuing to produce a diverse mix of timely articles appears critical to expand the readership and impact of the newsletter and meet the needs of all audiences.

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1. WELCOME

You can drive the future of University of Minnesota Extension **Yard and Garden News (Y&G News)**! We want to do the best we can for you, so we need to know more about you: your opinions, your interests, and your thoughts on the newsletter.

The details:

- Tell us about yourself, get a prize! At the end of the survey, remember to print your coupon for the University of Minnesota Landscape Arboretum.
- The survey takes about 15 minutes to complete.
- Please complete it before June 17.

We know you have strong opinions (you are a gardener, after all...), so let us hear them!

Please choose the answers that best represent your experience and opinions about the Y&G News.

PART 1. HOW YOU CONNECT WITH THE Y&G NEWS

1. Have you looked at the Y&G News in the past year?

☐ Yes

☐ No

2. Welcome to the Yard and Garden News

You indicated that you have not looked at the Y&G News. If you would like to see it, please view the Y&G Newsletter at the following link.

Please copy and paste this URL into a new page to see the Yard and Garden News:

<http://www.extension.umn.edu/gardeninfo/ygnews/index.html>

1. Please click next to collect your coupon for admittance to the University of Minnesota Landscape Arboretum.

Next

3. PART 1. HOW YOU CONNECT WITH THE Y&G NEWS

1. How many of each season's newsletters have you clicked on and opened up over the past year?

	No newsletters	Some newsletters	Most newsletters	All newsletters
Spring (5 newsletters)	☐	☐	☐	☐
Summer (6 newsletters)	☐	☐	☐	☐
Fall (3 newsletters)	☐	☐	☐	☐
Winter (3 newsletters)	☐	☐	☐	☐

2. How many of each season's newsletters have you read at least one complete article over the past year?

	No newsletters	Some newsletters	Most newsletters	All newsletters
Spring (5 newsletters)	☐	☐	☐	☐
Summer (6 newsletters)	☐	☐	☐	☐
Fall (3 newsletters)	☐	☐	☐	☐
Winter (3 newsletters)	☐	☐	☐	☐

3. Of those newsletter issues in which you read at least one complete article, how many articles did you typically read:

- ☐ All of the articles
- ☐ 3 or more articles
- ☐ 2 articles
- ☐ 1 article
- ☐ I have not read a complete article this past year

4. The Y&G News has been archived on the Extension website (www.extension.umn.edu/gardeninfo/ygnews/index.html#searcharchives) and you can use the search engine to type in key words and find past articles.

How often have you searched this archive within the past year?

- ☐ Four or more times
- ☐ Two or three times
- ☐ Once
- ☐ Never

5. How did you first learn about the Y&G News?

- ☐ From a friend
- ☐ The University of Minnesota Extension website or electronic news announcement
- ☐ An Extension (including Master Gardener) sponsored event
- ☐ Referral from an Extension employee or Master Gardener volunteer
- ☐ Garden center
- ☐ Other (please specify)

6. *At the bottom of the Y&G News there is a link to subscribe to a free email reminder that announces the posting of a new issue.* How useful to you is the email reminder that includes the link to the current issue of the Y&G News:

- ☐ Very useful to me
- ☐ Somewhat useful to me
- ☐ Slightly useful to me
- ☐ Not useful to me
- ☐ I do not receive an email reminder

4. PART 2. YOU AND OTHER UNIVERSITY OF MINNESOTA GARDENING RESOURCES

1. *The Y&G News has been recently relocated within the new University of Minnesota Extension Garden Information web page. There are additional links to gardening information in the left hand column of the Garden Information under the Yard and Garden News current issue and archived issues links.*

How often do you access University of Minnesota gardening resources, other than the Y&G News, on the Gardening Information website (www.extension.umn.edu/gardeninfo)?

☐ More than 10 times per year

☐ 6-10 times per year

☐ 1-5 times per year

☐ I have not explored these other gardening resources

5. PART 3. YOUR OPINION OF THE Y&G NEWS FORMAT

1. I think the length of the newsletter is:

- ☐ Too long
- ☐ The right length
- ☐ Too short

2. I think the number of articles included in the newsletter is:

- ☐ Too many articles
- ☐ The right amount of articles
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- ☐ Appear within five seconds
- ☐ Appear between 6 and 15 seconds
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- ☐ Online with dial up internet connection
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- ☐ Other (please specify)

7. I think the visual layout of the newsletter has typically been:

☐ Appealing

☐ Okay

☐ Unattractive

8. The hyperlinked table of contents (allowing you to jump to specific articles while online) has been:

☐ Very useful

☐ Somewhat useful

☐ Not useful

☐ I typically do not use this feature

9. From May through September we publish the extra “Mid-month Update Edition” of the Y&G News, generally containing shorter, more seasonally specific articles.

How valuable did you find the "Mid-month Update Editions" of the Y&G News to be?

☐ Very valuable

☐ Somewhat valuable

☐ Not valuable enough to warrant an extra edition of the newsletter

10. I would most prefer to receive the Y&G News:

☐ Once a month without mid month updates during the growing season

☐ Once a month with mid month updates during the growing season (current situation)

☐ Weekly with one or two key theme articles

☐ Throughout the month without a set schedule with one or two key theme articles as they are ready or appropriate

☐ Other

Other (please specify)

6. PART 4. YOUR Y&G NEWS TOPIC INTERESTS

1. The technical level of the newsletter articles are generally:

- ☐ Too technical
- ☐ The right technical level
- ☐ Too basic

2. The usefulness of the Y&G News information this past year has been:

- ☐ Extremely useful to me
- ☐ Quite useful to me
- ☐ Somewhat useful to me
- ☐ Slightly useful to me
- ☐ Not useful to me

3. To what degree has the Y&G News improved your ability to make informed decisions regarding your gardening this year?

- ☐ Much
- ☐ Some
- ☐ Little
- ☐ None

4. To what degree has Y&G News information led to changes in your practices regarding each of the following topics in the past two years:

	No opportunity to practice	No change	Little change	Some change	Much change
Flowers	☐	☐	☐	☐	☐
Landscape design	☐	☐	☐	☐	☐
Lawn care	☐	☐	☐	☐	☐
Pest (disease and insect) control	☐	☐	☐	☐	☐
Plant selection	☐	☐	☐	☐	☐
Tree and shrub care	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

Other (please specify)

5. Has the Y&G News provided you with specific information you found extremely valuable in the past two years?

☐ No

☐ Yes

If yes, please share with us what the information was and why it was valuable to you.

5

6

6. To what degree are you interested in the following topics for future articles?

	Not interested	Slightly interested	Interested	Very interested
Diseases	☐	☐	☐	☐
Environmental stewardship	☐	☐	☐	☐
Flowers (annuals and perennials)	☐	☐	☐	☐
Fruit and vegetables	☐	☐	☐	☐
Houseplants	☐	☐	☐	☐
Insects	☐	☐	☐	☐
Landscape design	☐	☐	☐	☐
Lawn care	☐	☐	☐	☐
Native plants	☐	☐	☐	☐
Soils	☐	☐	☐	☐
Trees and shrubs	☐	☐	☐	☐
Other	☐	☐	☐	☐

Other (please specify)

7. Past events such as “Meet the Plant Doctor” at the Minnesota Landscape Arboretum and the 100th anniversary celebration at Lyndale Park Rose Garden were advertised in the Y&G News.

Would you like the newsletter to continue to advertise major horticulture-related events?

☐ Yes

☐ No

8. Please compare the usefulness of the gardening information you received through the Y&G News with the *newspapers* listed below. The Y&G News is:

	Have not used this resource	Less useful	About the same	More useful
Minneapolis Star Tribune	☐	☐	☐	☐
St. Paul Pioneer Press	☐	☐	☐	☐
Other	☐	☐	☐	☐

Other (please specify)

9. Please compare the usefulness of the gardening information you received through the Y&G News with the *magazines* listed below.

	Have not used this resource	Less useful	About the same	More useful
Arboretum News	☐	☐	☐	☐
Fine Gardening	☐	☐	☐	☐
Horticulture	☐	☐	☐	☐
Northern Gardener	☐	☐	☐	☐
Other	☐	☐	☐	☐

Other (please specify)

10. Please compare the usefulness of the gardening information you received through the Y&G News with your favorite *web based periodical* you list below.

	Have not used this resource	Less useful	About the same	More useful
Your favorite web based gardening periodical	☐	☐	☐	☐

Please provide name and URL of this web-based periodical

11. I believe the gardening information in the Y&G News is overall:

- ☐ More trustworthy than other periodicals I use
- ☐ Similarly trustworthy to other periodicals I use
- ☐ Less trustworthy than other periodicals I use
- ☐ I don't use other periodicals

12. I value the Y&G News most for: (Please choose only up to two)

- ☐ Reliable research based information from the University of Minnesota
- ☐ Timely information on gardening topics
- ☐ New trends in gardening
- ☐ Valuable information on pest problems
- ☐ Other

Other (please specify)

13. Overall how satisfied are you with the Y&G News?

- ☐ Very satisfied
- ☐ Satisfied
- ☐ Neutral
- ☐ Unsatisfied
- ☐ Very unsatisfied

7. PART 5. UNDERSTANDING YOU, OUR READER

1. Please indicate your gender.

☐ Female

☐ Male

2. Please indicate your age range.

☐ Less than 20

☐ 20-29

☐ 30-39

☐ 40-49

☐ 50-59

☐ 60-69

☐ 70+

3. Please indicate your location.

☐ Minnesota

☐ Midwest United States

☐ Outside Midwest and in the United States

☐ Canada

☐ Outside of Canada and the United States

4. How many years have you been gardening?

☐ More than 10 years

☐ 6 - 10 years

☐ 3 - 5 years

☐ 0 - 2 years

5. How experienced of a gardener do you consider yourself?

☐ Advanced

☐ Intermediate

☐ Beginner

6. What type(s) of gardening primarily describe what you participate in? (choose all that apply)

☐ Flower gardening

☐ Fruit and vegetable gardening

☐ Houseplants

☐ Lawn Care

☐ Natives

☐ Trees and shrubs

☐ Other (please specify)

7. What location(s) do you typically find yourself gardening? (check all that apply)

☐ Community gardens

☐ Containers (indoors and/or outdoors)

☐ Farm

☐ Public spaces (municipalities, commercial businesses, etc.)

☐ Residential lot - large

☐ Residential lot - medium

☐ Residential lot - small

☐ Other (please specify)

8. *The Master Gardener Program is an education/volunteer program hosted in each state by the Extension branch of the state's land grant institution.*

I am currently active as:

☐ A University of Minnesota Master Gardener

☐ Master Gardener in another state

☐ I completed the training, but am not currently active

☐ I have not completed the Master Gardener training

9. Have you visited the University of Minnesota Landscape Arboretum within the past year?

☐ Yes

☐ No

10. Have you completed a formal post-secondary degree in horticulture or a closely related plant science discipline?

☐ Yes

☐ No

11. Are you actively employed in the horticulture industry?

☐ No

☐ Yes, full time

☐ Yes, part time

12. Besides the newsletter, there are other ways that the University of Minnesota Horticulture team can provide you with information. Please indicate ways in which you would like to receive gardening related information. (check all that apply)

☐ Educational CDs

☐ Live seminars

☐ Hands-on workshops

☐ Blog

☐ News releases in local newspapers and radio

☐ Online courses

☐ Podcasts

☐ Printed fact sheets

☐ Radio programs

☐ Garden Information Website- Diagnostic tools (plant and pest ID)

☐ Garden Information Website- written publications

☐ I do not want to be provided with information in other ways

☐ Other (please specify)

8. PART 6. FINAL COMMENTS ABOUT THE NEWSLETTER

1. Would you recommend the Y&G News to a friend?

☐ Yes

☐ No

2. The things I like most about the newsletter are:

	5
	6

3. The things I like least about the newsletter and would like to see improved are:

	5
	6

THANK YOU for your valuable time. Your information will help us to better serve you in the future.

MINNESOTA LANDSCAPE ARBORETUM

Come experience for yourself the year-round, premier public garden with more than 1,000 acres of display gardens, woodlands and prairie.

- Three-mile drive; hiking, ski and snowshoe trails; guided nature walks, tours; gift store, restaurant, horticultural library; venues for weddings, meetings, group picnics; exhibitions.

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OFFER EXPIRES 07/12/09

1. WELCOME

You can drive the future of University of Minnesota Extension **Yard and Garden News (Y&G News)**! We want to do the best we can for you, so we need to know more about you: your opinions, your interests, and your thoughts on the newsletter.

The details:

- Tell us about yourself, get a prize! At the end of the survey, remember to print your coupon for the University of Minnesota Landscape Arboretum.
- The survey takes about 15 minutes to complete.
- Please complete it before June 17.

We know you have strong opinions (you are a gardener, after all...), so let us hear them!

Please choose the answers that best represent your experience and opinions about the Y&G News.

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☐ Yes

☐ No

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- ☐ All of the articles
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- ☐ The right length
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☐ Other

Other (please specify)

6. PART 4. YOUR Y&G NEWS TOPIC INTERESTS

1. The technical level of the newsletter articles are generally:

- ☐ Too technical
- ☐ The right technical level
- ☐ Too basic

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- ☐ Little
- ☐ None

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Landscape design	☐	☐	☐	☐	☐
Lawn care	☐	☐	☐	☐	☐
Pest (disease and insect) control	☐	☐	☐	☐	☐
Plant selection	☐	☐	☐	☐	☐
Tree and shrub care	☐	☐	☐	☐	☐
Other	☐	☐	☐	☐	☐

Other (please specify)

5. Has the Y&G News provided you with specific information you found extremely valuable in the past two years?

☐ No

☐ Yes

If yes, please share with us what the information was and why it was valuable to you.

5

6

6. To what degree are you interested in the following topics for future articles?

	Not interested	Slightly interested	Interested	Very interested
Diseases	☐	☐	☐	☐
Environmental stewardship	☐	☐	☐	☐
Flowers (annuals and perennials)	☐	☐	☐	☐
Fruit and vegetables	☐	☐	☐	☐
Houseplants	☐	☐	☐	☐
Insects	☐	☐	☐	☐
Landscape design	☐	☐	☐	☐
Lawn care	☐	☐	☐	☐
Native plants	☐	☐	☐	☐
Soils	☐	☐	☐	☐
Trees and shrubs	☐	☐	☐	☐
Other	☐	☐	☐	☐

Other (please specify)

7. Past events such as “Meet the Plant Doctor” at the Minnesota Landscape Arboretum and the 100th anniversary celebration at Lyndale Park Rose Garden were advertised in the Y&G News.

Would you like the newsletter to continue to advertise major horticulture-related events?

☐ Yes

☐ No

8. Please compare the usefulness of the gardening information you received through the Y&G News with the *newspapers* listed below. The Y&G News is:

	Have not used this resource	Less useful	About the same	More useful
Minneapolis Star Tribune	☐	☐	☐	☐
St. Paul Pioneer Press	☐	☐	☐	☐
Other	☐	☐	☐	☐

Other (please specify)

9. Please compare the usefulness of the gardening information you received through the Y&G News with the *magazines* listed below.

	Have not used this resource	Less useful	About the same	More useful
Arboretum News	☐	☐	☐	☐
Fine Gardening	☐	☐	☐	☐
Horticulture	☐	☐	☐	☐
Northern Gardener	☐	☐	☐	☐
Other	☐	☐	☐	☐

Other (please specify)

10. Please compare the usefulness of the gardening information you received through the Y&G News with your favorite *web based periodical* you list below.

	Have not used this resource	Less useful	About the same	More useful
Your favorite web based gardening periodical	☐	☐	☐	☐

Please provide name and URL of this web-based periodical

11. I believe the gardening information in the Y&G News is overall:

- ☐ More trustworthy than other periodicals I use
- ☐ Similarly trustworthy to other periodicals I use
- ☐ Less trustworthy than other periodicals I use
- ☐ I don't use other periodicals

12. I value the Y&G News most for: (Please choose only up to two)

- ☐ Reliable research based information from the University of Minnesota
- ☐ Timely information on gardening topics
- ☐ New trends in gardening
- ☐ Valuable information on pest problems
- ☐ Other

Other (please specify)

13. Overall how satisfied are you with the Y&G News?

- ☐ Very satisfied
- ☐ Satisfied
- ☐ Neutral
- ☐ Unsatisfied
- ☐ Very unsatisfied

7. PART 5. UNDERSTANDING YOU, OUR READER

1. Please indicate your gender.

☐ Female

☐ Male

2. Please indicate your age range.

☐ Less than 20

☐ 20-29

☐ 30-39

☐ 40-49

☐ 50-59

☐ 60-69

☐ 70+

3. Please indicate your location.

☐ Minnesota

☐ Midwest United States

☐ Outside Midwest and in the United States

☐ Canada

☐ Outside of Canada and the United States

4. How many years have you been gardening?

☐ More than 10 years

☐ 6 - 10 years

☐ 3 - 5 years

☐ 0 - 2 years

5. How experienced of a gardener do you consider yourself?

☐ Advanced

☐ Intermediate

☐ Beginner

6. What type(s) of gardening primarily describe what you participate in? (choose all that apply)

☐ Flower gardening

☐ Fruit and vegetable gardening

☐ Houseplants

☐ Lawn Care

☐ Natives

☐ Trees and shrubs

☐ Other (please specify)

7. What location(s) do you typically find yourself gardening? (check all that apply)

☐ Community gardens

☐ Containers (indoors and/or outdoors)

☐ Farm

☐ Public spaces (municipalities, commercial businesses, etc.)

☐ Residential lot - large

☐ Residential lot - medium

☐ Residential lot - small

☐ Other (please specify)

8. *The Master Gardener Program is an education/volunteer program hosted in each state by the Extension branch of the state's land grant institution.*

I am currently active as:

☐ A University of Minnesota Master Gardener

☐ Master Gardener in another state

☐ I completed the training, but am not currently active

☐ I have not completed the Master Gardener training

9. Have you visited the University of Minnesota Landscape Arboretum within the past year?

☐ Yes

☐ No

10. Have you completed a formal post-secondary degree in horticulture or a closely related plant science discipline?

☐ Yes

☐ No

11. Are you actively employed in the horticulture industry?

☐ No

☐ Yes, full time

☐ Yes, part time

12. Besides the newsletter, there are other ways that the University of Minnesota Horticulture team can provide you with information. Please indicate ways in which you would like to receive gardening related information. (check all that apply)

☐ Educational CDs

☐ Live seminars

☐ Hands-on workshops

☐ Blog

☐ News releases in local newspapers and radio

☐ Online courses

☐ Podcasts

☐ Printed fact sheets

☐ Radio programs

☐ Garden Information Website- Diagnostic tools (plant and pest ID)

☐ Garden Information Website- written publications

☐ I do not want to be provided with information in other ways

☐ Other (please specify)

8. PART 6. FINAL COMMENTS ABOUT THE NEWSLETTER

1. Would you recommend the Y&G News to a friend?

☐ Yes

☐ No

2. The things I like most about the newsletter are:

	5
	6

3. The things I like least about the newsletter and would like to see improved are:

	5
	6

THANK YOU for your valuable time. Your information will help us to better serve you in the future.

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