Abstract
A new program targeting "unengaged" woodland owners was pilot-tested then expanded throughout Wisconsin. Our purposes for this article are first, to share a successful program model for targeting "unengaged" woodland owners, and second, to illustrate the integral application of evaluation to program improvement and documenting impacts. We draw from multiple years of evaluation data, including session questionnaires and post-workshop surveys. Insights reinforce the value of studying intended audiences, integrating evaluation, and maintaining flexibility when delivering and evaluating programs.

Introduction
Extension is recognized for its capacity to design and implement outreach programs that meet the needs of diverse audiences. Family forest owners are of particular concern for natural resources Extension professionals because of their significant roles in ensuring forest health and productivity and "keeping forests as forests" (Butler et al., 2007). Family forest owners control 264 million acres (35%) of woodland in the United States (Butler & Leatherberry, 2004). High rates of land transfer, changing owner characteristics, and their various reasons for ownership makes the design (and evaluation) of outreach and Extension programs for this audience particularly challenging (Butler et al., 2007; Kittredge, 2004).

Nationally, Extension employs a variety of educational approaches for family forest owners (e.g., Downing & Finely, 2005). Activities range from traditional Extension approaches such as workshops, classes, and conferences to newer electronic formats involving webinars or online interactive learning. Some programs are targeted at specific needs. For example, Ohio State University Extension's "welcome wagon approach" (Apsley, Bagley, & Samples, 2005) provides new woodland owners in Appalachian Ohio with the contacts and information for making informed decisions about their forest resources. Ties to the Land—developed by Oregon State University Extension and partners—focuses on succession planning for forest landowners who want to ensure family ownership continuity across generations.
In this article, we describe the development, implementation, and ongoing evaluation of Wisconsin's statewide Learn About Your Land (LAYL) program. LAYL targets family forest owners who are "unengaged" with the forestry community and related support programs. Specifically, they are private owners with more than 10 acres of woodland who have not enrolled in state tax-incentive programs, are not involved with woodland owner associations, generally do not have management or stewardship plans, and have no or limited prior participation in educational events for woodland owners. University of Wisconsin (UW) Extension educators defined the audience and developed and implemented the program in partnership with the Wisconsin Department of Natural Resources (WDNR) and instructional partners.

Evaluation has been integral to program development and ongoing implementation. From the outset, Extension educators and partners were interested in documenting that the program: a) reached the intended audience, b) increased knowledge of management options, and c) induced desired forestry actions by program participants. Our purposes for this article are twofold. First, we want to share Wisconsin's model of a successful program targeting "unengaged" family forest owners; second, to illustrate the integral role of evaluation and the insights gained for program improvement and documenting impacts. We present the article chronologically, beginning with the development and evaluation of an initial pilot program. The pilot phase led to broader statewide implementation and ongoing evaluation. We conclude with a summary of findings and insights on evaluating extension programs for landowner audiences.

Program Development and Improvement

Pilot Stage

Pilot Development and Testing

The LAYL program model emerged through a partnership between WDNR, UW Extension, and three local nature centers. The idea was to attract unengaged woodland owners by offering a mixture of 2-hour classes featuring topics of interest and moving them towards implementing forest management practices. As developed, pilot classes had the following nine characteristics:

1. Topics covered were county specific.
2. Local foresters influenced topics offered.
3. Locations were close to woodland owners.
4. Classes were relatively short (2 hours).
5. Series covered multiple topics from which woodland owners could choose.
6. Sessions were offered on multiple dates and times.
7. Classes were held at neutral locations (not agency offices).

8. WDNR foresters and other specialists were featured.

9. Topics were selected so classes appealed to a variety of interests related to owning woodland besides timber harvest.

Topics offered during pilot stage LAYL classes were selected to appeal to owners with limited woodland management experience. Pilot stage topics included:

- Native trees, tree identification, and why trees grow where they do,
- Managing woodland for wild turkeys and other favorite game species,
- Growing, harvesting and burning firewood,
- Planning for successful forest management,
- When and how to cut (or not cut) and trim trees,
- Tree planting,
- Managing for maple syrup,
- Forest measurement,
- Forest health and invasive species, and
- Available people and programs to assist in managing woodlands.

Program organizers contacted target participants in a three-county area through direct mailings of a specialized program brochure. Using county property tax records, mailings were sent to owners with five acres or more of woodlands. Three direct mailings to 4,175 woodland owners advertised the classes in the three counties; the third mailing also included articles with helpful hints for managing woodland.

A series of 15 classes were held at each of three local nature centers (for a total of 45 sessions). Nature center staff helped deliver classes and administer evaluation surveys. Pilot classes ran from September 2006 through December 2007. Session attendance totaled 852, representing 328 households owning 10,000 woodland acres (Table 1).

**Pilot Evaluation Methods and Results**

The pilot was evaluated through four components: 1) a two-part in-class survey, 2) a 6-month-post-class mailed survey of participants, 3) a 6-month-post-class survey of a sample of non-attendees, and 4) interviews with participating instructional partners (foresters and nature center staff). (See
Table 2 for a summary of methods used in the pilot and subsequent programs.) The methods used in the pilot stage formed the basis for ongoing evaluation of the expanded program.

The pilot in-class survey was a one-sheet questionnaire (front-and-back) administered before and after each session. One section collected data from all participants, and another was to be completed by only one member of each household. The 455 completed responses represent 328 unique households. A post-class mailed survey was sent to those participant households 6 months after the class series ended. Adjustments for incorrect addresses left a useable sample of 298 households for the post-class survey; 229 completed surveys were returned for a response rate of 76%. The non-attendee survey involved a stratified random sample of 437 households drawn from the original mailing list of those invited to attended classes but who did not participate. Incorrect addresses and refusals reduced the useable sample was 395. Two hundred and sixty-one (261) completed surveys yielded a response rate of 66%. Finally, UW Extension evaluators conducted interviews with nature center staff and five agency foresters who presented information in the classes.

Results of the in-class evaluations showed that programs were successful in attracting the targeted audience. For example, only 7% of participants belonged to a woodland owner membership organization, and 64% had not attended a woodland event or activity in the 2 years prior to participating in a LAYL class. Class surveys also showed that attendees were highly satisfied with the classes, considered the information they received as being very useful, and gave presenters high ratings. A larger majority (93%) of the class attendees felt that their knowledge about the featured topics had increased and that they intended to use what they had learned. Fifty-one percent (51%) gave one or more specific examples of what they learned at the session and how it would apply on their property.

Results of the post-class survey (6 months afterwards) reinforced that classes achieved their intended educational effects. An overwhelming majority (90%) of those who attended at least one class and who completed a survey felt they had gained valuable knowledge from attending. Seventy-five percent (75%) reported that knowledge of their woodlands had increased somewhat to a lot. The same percent reported that their interests in managing their woodlands had increased somewhat to a lot. Thirty-five percent (35%) contacted a forester after attending a class, and 48% said that they took some sort of action as a result of what they learned at a class. Trimming, planting, and thinning their woodland were frequently mentioned actions.

The non-attendee survey (also conducted 6 months afterwards) allowed for comparing attendees and non-attendees. Results showed that the attendees and non-attendees were similar across most demographic measures (age, acres owned, etc.), with the exception of a statistically significant difference in the number of years of woodland ownership. The two groups differed significantly on several other dimensions related to managing woodlands. Attendees participated in more activities that improved their woodland, had more involved management styles, and thought about their woodlands more frequently than non-attendees. Class attendees placed greater importance on natural features of the woodland and personal connection to nature as reasons for ownership than non-attendees, who valued more utilitarian reasons for owning woodlands, such as hunting.

As the final component of the pilot evaluation, interviews showed that nature center staff were very
positive about hosting the classes. They mentioned numerous benefits, including new program offerings for adult populations. In contrast, agency foresters expressed mixed feelings about the classes. As a group, the agency foresters were somewhat guarded about expectations for long-term impacts of classes on participants' woodland management decisions.

**Program Expansion**

**Refinements for Broader Implementation**

As the pilots were progressing, it became clear from in-class responses that the LAYL approach offered an effective new model for reaching unengaged landowners. Beginning in late 2007, prior to completing the pilot classes, the decision was made to offer similar programs to other areas across the state. As with the pilot program, organizers used county property tax records to identify participants. Those with property enrolled in Wisconsin's Managed Forest Law (tax-incentive) program were excluded. The acreage threshold was increased to 10 to shorten mailing lists and to reflect pilot audience data showing a large majority of attendees had 10 acres or more of woodland. Because topics were to be "county specific" and chosen with consultation from local foresters, topics varied by location but remained consistent with those offered in the pilot.

By the end of September 2008, three series totaling 64 classes were held in 11 counties spread across the state. Different class locations were added each year between 2008-2011 (Table 1).

Building upon the pilot stage, brochures mailed to participants with class information were professionally designed. Additional, brief, educational content related to woodland management was included with the brochure as an insert.

<table>
<thead>
<tr>
<th>Table 1. Programs and Classes by Year</th>
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<tr>
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<tr>
<td>Number of County locations</td>
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<tr>
<td>Number of classes (sessions)</td>
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<tr>
<td>Total class/session Attendance</td>
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<tr>
<td>Unique Households represented</td>
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<tr>
<td>Acreage represented</td>
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As the program developed, new educational approaches were also included. Between January and February 2009 a series of six 1-hour, online sessions were offered; each online class was repeated twice on the day offered. These webinars attracted 88 additional family forest owner households. The
following year, 2010, webinars were advertised in all brochures. Also, to accommodate those owning
woodlands in other areas but living near program sites, a software package that sorted by zip codes
was used to identify potential woodland owners within 35 miles of each location. That distance was
reduced for classes offered in Milwaukee.

**Expanded Evaluation Methods and Results**

As with the pilot, ongoing evaluation supported program improvements and documented outcomes.
Evaluation consisted of three of the four components used in the pilots, eliminating the interviews
(Table 2). Consistent with the pilot, questionnaires were designed to be brief and easy to answer.
Questions were field tested with actual woodland owners. Surveys were administered following
established procedures for generating high response rates, including multiple contacts with
respondents (as opposed to often-used one shot mailing).

<table>
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<th>Table 2. Evaluation Components</th>
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<tr>
<td><strong>In class audience</strong></td>
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<tr>
<td>characteristic questionnaire</td>
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<td><strong>Pilot+ (2006-07)</strong> 455 completed questionnaires (representing session/class attendees)</td>
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<tr>
<td><em><em>End-of-session</em> (in-class)</em>*</td>
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<tr>
<td>455 completed questionnaires representing session/class attendees</td>
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<td><strong>Attendees/Households:</strong></td>
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<td>Post-class impact survey* (6-8 months later)</td>
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<tr>
<td>229 completed questionnaires representing attending households (76% response rate)</td>
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<tr>
<td><em><em>Non-attendees survey/Households</em> (6-8 months later)</em>*</td>
</tr>
<tr>
<td>261 completed questionnaires representing households (66% response rate)</td>
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</tbody>
</table>
The in-class surveys produced data on reaction to classes, perceptions of knowledge gained, and intentions to use information gained from class. These included specific written examples of ideas and practices they intended to use. Surveys also generated data on age, management, attachment to woodlands, use of foresters and other professionals, acres owned, membership in a woodland owner organization, and activities completed since owning their woodland.

As with the pilot, the second component consisted of periodic post-class surveys of attendees conducted 6 to 8 months after classes. Five post-class surveys were conducted, including the pilot. Post-class surveys were mailed to all attending households.

The third evaluation component involved surveying non-attendees (those receiving a class brochure but not attending). As had been done for the pilots, non-attendees were surveyed once again in 2010. The 2010 survey involved a final sample of 764 randomly selected non-attendees from all those who were mailed a brochure. There were 488 returned surveys yielding a response rate of 64%.

Results were summarized in multiple formats, primarily for program planners, funders, and instructional partners. Select highlights are presented in Table 3. As with the pilot classes and regardless of location, attendees fit the targeted characteristic of being "unengaged." Prior to attending LAYL classes, few had attended woodland-related events in the previous two years (e.g., only 18% across all years), small numbers had a written woodland plan (24%), and hardly any belonged to a woodland owner organization (e.g., only 12% from 2009 classes and 8% from 2010 classes). A majority across all years had not had any discussions regarding their woodland with a WDNR or private forester.

An overwhelming majority of attendees was highly satisfied with the classes, considered the information they received as being very useful, and gave presenters high ratings. A larger majority (never less than 93%) of the class attendees felt that their knowledge about the featured topics at classes they attended had increased and that they intended to use what they had learned. Analysis of written comments showed a variety of intended actions. High percentages (ranging from 83% to 93%) would definitely recommend the classes to other woodland owners they knew.

Across multiple years, the post-class assessments generally concluded: 1) classes increased interests in and awareness of woodland management, 2) classes prompted respondents to use foresters after classes and in the future, 3) respondents did a variety of woodland improvement activities as a result of classes, 4) high numbers of respondents owned woodland for non-utilitarian reasons, and 5) in the future respondents will retain ownership, harvest timber and do more improvement.
activities while being more likely to use foresters.

For example, from 2009 post-class surveys, 71% reported that they were thinking more about the future of their woodland compared to before attending classes. A majority (66%) of those who attended one or more classes felt that they had gained useful information for making decisions about their woodland. Nearly a third (30%) of the survey respondents had already contacted a forester after the classes. Another 74% intended to contact a professional forester in the future to discuss specific woodland activities they intended to do within the next five years. Many (44%) had already carried out various woodland-related activities since taking the classes, including tree planting and removing invasive species.

A comparison of attendees and non-attendees revealed several statistically significant differences. As with the pilots, their demographics were similar, but non-attendees intended to do fewer activities on their woodland during the next 5 years compared to attendees. Also, more non-attendees lived on their woodland, and fewer non-attendees identified recreation other than hunting as important reason for owning their woodland.

### Table 3.
Key Participant Characteristics and Outcomes

<table>
<thead>
<tr>
<th>Source of information ( # answering question)</th>
<th>Percent of woodland owners (2006-2011)</th>
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<tbody>
<tr>
<td>End-of-session questionnaire (of 2,535 households)</td>
<td>76% No woodland management plan before attending</td>
</tr>
<tr>
<td>End-of-session questionnaire (of 2,729 households)</td>
<td>82% No participation on other woodland courses in previous two years</td>
</tr>
<tr>
<td>In-class questionnaire (of 7,440 session participants)</td>
<td>99% Increased knowledge of woodland management increased</td>
</tr>
<tr>
<td>In-class questionnaire (of 7,233 session participants)</td>
<td>81% Identified specific intended actions</td>
</tr>
<tr>
<td>Post-class survey (of 1,576 households)</td>
<td>90% Identified specific completed actions 6-8 months after classes</td>
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</tbody>
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### Insights for Extension Programming

The LAYL program has been successful in reaching new audiences, increasing awareness, inducing
new actions, and expanding connections with the forestry community. As noted previously, a large majority of participants had neither prior involvement with forestry outreach education nor communication with the forestry community. The experience of programming and evaluating this initiative offers insights for Extension programming.

**Importance of Audience Analysis**

In-class questionnaires helped us document that our format was attracting the intended audience. Attendee data, along with data from those not attending, also helped us learned more about segments within our target audience with differing interests and motivations for attending programs and taking management actions. The additional information about audience segments helped focus limited resources and influenced refinements in classes, for example, adding classes in urban areas for people who live in the major metropolitan areas but owned woodland elsewhere in the state. In our case, audience analysis has helped Extension educators better identify and know their audience, and it additionally has helped our major partner, the WDNR Division of Forestry, to better understand one of its important target audiences.

**Importance of Ongoing and Integrated Evaluation**

Integrating evaluation throughout planning and implementation helped us to understand and document how the program was making a difference for targeted participants—it produced valuable impact data. Beyond data about numbers of classes offered, numbers of participants, and information about their characteristics, the information about what participants actually took away from the class and what they did has been highly valuable. This information has been essential for maintaining support for funding, continued implementation, and continuing partnerships.

The continuous component of evaluation also has allowed for a longitudinal perspective of a program from its infancy to full maturity. Previous research has found reflecting on evaluation data to be important for improving voluntary environmental programs, yet generally lacking in practice (e.g., Genskow & Wood, 2011). A long-term perspective is useful for reviewing how the program has worked and also provides cues for initiating other programs. For example, reflection and responses from LAYL reinforced the value of face-to-face sessions and also suggested value in developing complementary educational materials in DVD and on-line formats.

**Importance of Flexibility in Programming and Evaluation**

Our experience with LAYL has reinforced the importance of designing flexibility into program delivery and allowing for revising programs based on feedback. Simple flexibilities could include offering classes at different times when people are available, taking advantage of multiple formats for reaching audiences, and focusing on content that will interest the target demographic and woodland user level. Evaluative information may identify important changes to content and delivery approaches of educational programs. Our pilot effort proved the concept and highlighted many areas to improve the programs. For the program described here, testing new course concepts or marketing approaches in some areas allowed for improvements before broader use statewide. Beyond changes to programming, it may also be important to adjust evaluation approaches to ensure data produced
are relevant and useful. In this case, we refined measures and questionnaire formats along with content and program delivery. The result is an effort that exceeded expectations and has become a valued program for Wisconsin.

**References**


