

OUTREACH TO LIMITED RESOURCE FOREST LANDOWNERS: CREATING EXTENSION MATERIALS FOR LOW LITERACY AUDIENCES

By

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Executive Summary

Existing forestry extension and educational materials provided by public agencies in the southeastern United States generally require forestry knowledge and are written at a reading level above the average literacy level in many rural counties. The Sustainable Woodlands project at North Carolina State University has assumed, based on extensive consultation, that existing publications are formatted in ways that are less reader friendly and are likely to frustrate low literacy readers due to small font size and few illustrations.

This research project 1) analyzed reading levels of existing forestry outreach materials available in the southeast; 2) developed new outreach materials that better meet the literacy needs of the target audience; and to 3) evaluated the new forestry outreach materials for content, style, and reading level (appropriate to audience) through conducting qualitative interviewing with landowners and state agency personnel.

The publications that were developed start from basics, are written in non-technical language, and have many illustrations that are closely related to the text and relevant to the intended audience. The literacy of outreach materials was analyzed using three literacy indices: FOG Index, and the Flesch Reading Ease and Flesch-Kincaid Grade Level Analyses (tools that accompany Microsoft Word software). All three techniques lead to essentially the same conclusion: existing forestry extension materials are generally not written at a level appropriate for the majority of people in the study counties.

New forestry outreach materials were developed to better meet the educational needs of a limited resource, low literacy audience by following guidelines compiled from various sources and seeking input from reviewers.

The first four publications are brief, highly focused materials that provide basic technical knowledge that landowners need to communicate with agency personnel as well as public and private assistance foresters. The first set of publications, entitled *Woods Wise*, provides detailed step-by-step information for example, the points that might be covered by an extension agent in a meeting with a landowner. The language is appropriate for someone reading at the fourth to sixth grade level. In contrast, the second set of publications, called *Tree Tips*, is brief fact sheets. All points are explained in short

sentences and are illustrated with line drawings, directing landowners towards the next steps and providing further sources of information.

Qualitative interviews were conducted with agency personnel and landowners to evaluate the new forestry outreach publications. In general respondents found the new publications easy to read, suggesting a font of 14 or higher and to focus for additional publications on hunting leases, pine straw production, and recreation.

The evaluation of current materials provides useful guidelines for development of new materials. These new materials should be specially tailored for these audiences, and include topics such as heir property issues, sources of financial or technical assistance, timber marketing and environmental and wildlife issues. Much of the forestry information available online covers these topics, with the exception of heir property issues. Thus, one feasible approach to developing new publications is simply to revise existing materials.

Limited resource and traditionally-underserved landowners are not as likely as other non-industrial private forest landowners to take part in extension and other educational programs. Research and literature reviews have shown that this audience prefers some type of face-to-face contact. Materials written at an appropriate reading level can complement this face-to-face contact. In order for extension staff to be more proactive in reaching this audience, agency personnel may need to tap the social capital found in the form of “breakfast clubs” and other groups that frequent restaurants and other venues in small towns, as well as examine the successes of the health and nutrition programs in reaching this audience.

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I. Introduction

Existing forestry extension and educational materials provided by public agencies in the southeastern United States generally require forestry knowledge and are written at a reading level above the average literacy level in many rural counties. The Sustainable Woodlands project at North Carolina State University has assumed, based on extensive consultation, that existing publications are formatted in ways that are less reader friendly and are likely to frustrate low literacy readers due to small font size and few illustrations. Based on these assumptions, two sets of publication have been introduced of new and revised outreach materials that address the needs of a low literacy, limited resource audience. Both sets of publications start from basics, are written in non-technical language, and have many illustrations that are closely related to the text and relevant to the intended audience.

This paper describes the evaluation of existing outreach materials, the methods of producing and evaluating new materials, and opportunities for preparing additional publications in these series.

The objectives of this research are to 1) analyze reading levels of existing forestry outreach materials available in the southeast; 2) develop new outreach materials that better meet the literacy needs of the target audience; and to 3) evaluate the new forestry outreach materials for content, style, and reading level (appropriate to audience) through conducting qualitative interviewing with landowners and state agency personnel.

II. Background

A. The Sustainable Woodlands Project

This graduate research project was a small component of a much larger research project, entitled the Sustainable Woodlands project. The Sustainable Woodlands project is funded through a Sustainable Agriculture Research and Development (SARE) grant (grant # LS01-126) under the United States Department of Agriculture (USDA). The Sustainable Woodlands project focuses on addressing the needs of limited resource and traditionally underserved forest landowners.

There are four major components to the Sustainable Woodlands project (see Appendix A). The study is being conducted in several rural counties in North Carolina:

“The project focus is on two clusters of counties in the southern and northern coastal plain of North Carolina, and on one county in eastern Virginia (Brunswick County, VA, Warren, Halifax, Northampton, Sampson, Duplin, and Robeson Counties, NC). These counties have many minority landholders, relatively large amounts of woodland on farms, and relatively large acreages of forest land in non-industrial private ownership (USDA-NASS 1997, USDA Forest Service 1990). They are representative of rural communities in the southern Atlantic coastal plain” (Sills and Warren No date)

As a component of the SARE project, this graduate research project produced a new line of forestry outreach materials. These materials focus on forest management topics that are not currently addressed in current outreach materials. These materials are written at reading levels that more readily meet the educational needs of the audience. Evaluation of these materials has been conducted through interviews in three of the seven Sustainable Woodlands project counties: Brunswick County, Virginia and Northampton and Robeson Counties in North Carolina.

B. Definition of Limited Resource

There has been insufficient research on minority and limited resource landowners and forests in the South. We do not know how many minority and limited resource forest landowners there are, where they are, how they use and manage their forests, and how they value their forests (Schelhas and Zabawa 2000). These gaps in our knowledge have great implications for extension and policy. The U.S. Department of Agriculture (USDA) has created definitions to help identify and target limited resource and underserved populations.

The United States Department of Agriculture has several definitions to characterize limited resource landowners (see Boxes 1 and 2)

Another way to categorize landowners is as “joiners” and “non-joiners” (Mater 2004). “Joiners” are landowners who are actively involved in commercial forestry (selling timber), characteristically have large amounts of land, high incomes, easy access to both governmental and private programs that offer technical and financial assistance (Warren, Williamson, and Sills 2002). This contrasts with “non-joiners”, under which limited resource landowners are a subgroup.

C. Demographic Profile of the Target Counties

These study counties are more likely to have substantial numbers of limited-resource forestland owners. They contain large percentages of minority owned and operated farms, large proportions of woodlands on farms, and non-industrial private forest holdings (Warren and Sills 2001). More than half of the population in each of these counties is minority, surpassing North Carolina and the nation by 30% or more

(U.S. Census Bureau 1999). These counties have residents with levels of education below the state average. According to 1999 census data, each county had at least 13% more non-high school graduates than did North Carolina, and 16% more than the United States (U.S. Census Bureau 1999). Each study county has more families below poverty than either the state or the nation. In 1999 Northampton County had 9% or more below poverty than the North Carolina average. Brunswick County had almost 7% more people living below poverty than Virginia's state average. Per capita income for each study county was less than 75% of the national average for 1999 (U.S. Census Bureau 1999) (see Table 1 and Figure 1).

D. Literacy in America

The National Adult Literacy Survey (NALS) has created a literacy continuum divided into 5 levels, with level 5 indicating the highest skill level. Almost all adults in level 1 can read a little but not well enough to fill out an application form, read a food label, or read a simple children's book. Adults in level 2 can usually compare and contrast information, or integrate pieces of information, but cannot read higher-level text and have difficulty with problem-solving skills. Adults in levels 3 through 5 usually can perform the same types of tasks, but on more lengthy and complex texts (NIFL 2004)(see Table 2)

This survey (1992) found that 23% of American adults (age 16 or older) perform at level 1. Over half of the North Carolina population performs at level 1 or 2. In Virginia 19% are at level 1. Robeson has 47% of its population at levels 1 and 2. In both of the other counties, 81% of the population performs at levels 1 and 2 (NIFL 2004) (see Figure 2).

III. Evaluating Existing Outreach Materials

Many existing forestry outreach publications and other resources on forest management contain highly technical terminology and are written at reading levels inappropriate for audiences at NIFL literacy levels 1 and 2. The literacy of outreach materials available throughout the Southeast was analyzed using three indices.

A. Methods

1. North Carolina Cooperative Extension Materials

Materials developed and distributed by North Carolina Cooperative Extension Forestry were evaluated. The materials were selected based on a survey of project personnel and collaborators, including representatives from extension, research, and non-governmental organizations. Each respondent rated approximately 25 titles in terms of their potential importance to limited resource landowners. This research project focused on the most highly rated materials, using three literacy evaluation methods.

a. Method I: List of Indicators

For the first method, a list of low-literacy indicators was developed. The indicators listed characteristics of appropriate organization, language/style (e.g., paragraph length and use of active voice), and design, including characteristics such as white space, font size, and paragraph length. Each of these was rated on a 1 to 5 scale, with 5 representing the best (Saunders and Dawson 2002) (see Appendix B).

b. Method II: The FOG Index

The second method used in this study is the Fog Index, which was originally developed by Robert Gunning (The Learning Web 2003) and has been proven authoritative for evaluating the readability and expected comprehension of written

materials. A passage or sample from the document, containing at least 100 words, is used to evaluate the text. First, the words and sentences are counted. Next, the number of “big” words is determined. Any words of three or more syllables are considered too big. Average sentence length is calculated by dividing the number of sentences into the number of words. The percentage of big words is calculated by dividing the number of words into the number of big words. This is added to the percentage of big words. The index score is calculated by multiplying the sum by .04. (University of Minnesota Libraries 1998).

c. Method III: Using the Flesch tools

While Microsoft Word checks spelling and grammar, it also makes an analysis of the reading level of the document, (Microsoft Corporation 2004) (see Box 3). The forestry extension materials were analyzed using the methods briefly described below.

i. Flesch Reading Ease

Flesch Reading Ease rates text on a 100-point scale using a formula based on average sentence length and average number of syllables per word. The higher the score, the easier it is to understand the document. For most standard documents, Microsoft suggests authors aim for a score of approximately 60 to 70 (Microsoft Corporation 2004) (see Appendix D).

ii. Flesch-Kincaid Grade Level Score

The Flesch-Kincaid Grade Level Score, on the other hand, uses an equation similar to that of the Flesch reading ease, rates text on a U.S. grade-school level. For example, a score of 8.0 means that the text is appropriate for a person who can read at an

eighth grade level. For most standard documents, Microsoft suggests authors aim for a score of approximately 7.0 to 8.0 (Microsoft Corporation 2004)(see Appendix D).

2. Materials Available in the Southeast

While this study focused on materials available in North Carolina, internet searches were conducted to find outreach materials from other southern states (see Figure 4). These materials were evaluated using two of the three methods described above: the FOG index and the Flesch tools.

B. Results

All three techniques lead to essentially the same conclusion: existing forestry extension materials are generally not written at an appropriate level for the majority of people in the study counties.

1. North Carolina Cooperative Extension Materials

a. List of Indicators

Using the list of indicators, most of the North Carolina Cooperative Extension materials rated 2 or 3, indicating that they are “not reader friendly,” or at best, they are “average” (see Appendix B).

b. FOG Index

The ideal Fog Index level for most readers (higher than level 2) is 7 or 8. A level above 12 indicates the writing sample is too hard for most people to read. *Readers' Digest* has a Fog Index of between 8 and 9 and *Time Magazine* is about 11 (The Learning Web 2003). The *Raleigh News and Observer* is written with an average index score

between 9 and 11 (News and Observer 2004). The North Carolina Cooperative extension materials all have Fog Index scores of 10 or more (Saunders and Dawson 2002).

c. Flesch tools

The extension documents evaluated in this study all rated at least at eighth grade levels (8.1 and higher), with Flesch Reading Ease scores of 33 to 68.

2. Materials Available in the Southeast

Online searches for forestry outreach materials or extension publications appropriate for these literacy levels produced few results. Although a few university extension websites have sites that give instructions of how to develop written materials for a low literacy audience (e.g., Oregon State University, Texas A&M University, and others), their forestry materials and publications do not seem to reflect these formatting suggestions. Online searches show that most extension publications targeted to a low literacy audience have been developed for health and nutrition curriculum and programming.

Southern Region Extension Forestry and most states provide on-line and downloadable forestry publications. Some include publications written at lower reading levels, but most of these have been designed for school children (e.g., through Project Learning Tree) and do not provide the technical management, legal, tax information, or marketing information needed by landowners. Only a couple of publications specifically targeting low literacy forest landowners were found, such as Winrock's *Top Dollar for Your Timber* (Winrock 1998) and a Land Loss Prevention Project (LLPP) document on inheritance issues (Amana and Harris 1997). An analysis of forestry publications from

several institutions and extension centers throughout the southeast revealed reading levels far above what adults performing at levels 1 or 2 could read or understand (see Figure 4).

IV. Producing New Low Literacy Materials

New forestry outreach materials were developed to better meet the educational needs of a limited resource, low literacy audience by following guidelines compiled from various sources and seeking input from reviewers.

A. Methods

The lack of good reading and comprehension skills is not an indication of intelligence (Gaston and Daniels 1988). Thus, new materials were planned for the needs of a specific audience. These publications could not simply water down information, significantly reduce technical content, or over simplify. Care has been taken not to appear condescending.

There are several excellent sources that provide guidelines for developing written materials for low literacy audiences (Miller 2001, Freeman 1998, Gaston and Daniels 1988, and Gunning-Miller Clear Institute 1973). One of the more significant messages was to “write like you talk” (Gunning-Miller Clear Institute 1973). The language in our publications may seem casual, but it clearly relays the message to the target audience.

Other significant guidelines that were useful:

- Connect the information to the readers’ experiences
- Use short sentences
- Keep an unjustified right margin
- Divide text using headings

- Use large font (12 or more)
- Create many visual cues and illustrations
- Write in active voice

(Miller 2001, Freeman 1998, Gaston and Daniels 1988, and Gunning-Miller Clear Institute 1973).

Due to the reliance of low literacy readers on visual cues (Gaston and Daniels 1988), many illustrations that are closely related to the text and relevant to the intended audience were used in the new publications.

University faculty, extension specialists and agents, consulting foresters, community leaders, staff of environmental organizations, an attorney, and educators, formally reviewed each draft publication. Reviewers were sent hard copy or electronic versions of each document and a form with guidelines for their review (see Appendix C), including key areas of format, organization, and content that they should evaluate. These reviews proved invaluable and resulted in significant improvements to all of the publications.

It was important for us to gather feedback from multiple sources and perspectives. The Sustainable Woodlands project team has partnered with non-profit organizations in the study counties who were able to give us input from the perspective of limited resource and traditionally underserved landowners. Some of the comments received from non-profit collaborators related to vocabulary and illustrations. For example, it was suggested that landowners might not feel information about ‘timberlands’ or ‘pine plantations’ would apply to them. ‘Woods’ and ‘forest’ are more common terms. (Additionally, although a consulting forester might use the word ‘plantation’

innocuously, it could have negative connotations to minority landowners)(Concerned Citizens for Tillery 2003). To ensure that the information, while simply stated, remains correct, we also sought feedback from forestry professionals.

B. Results

The first four publications are brief, highly focused materials that provide basic technical knowledge that landowners need to communicate with agency personnel as well as public and private assistance foresters.

Two new publication series have been produced, accommodating four audiences:

- 1) extension personnel and community, religious, and educational leaders;
- 2) forestry and natural resource professionals;
- 3) schools (K-12); and
- 4) limited resource, low literacy landowners.

One set meets the needs of audiences 1-3. The second set meets the needs of audiences 3 and 4. A common logo represents multiple uses of small woodlands.

The first set of publications, entitled *Woods Wise*, provides detailed step-by-step information for example, the points that might be covered by an extension agent in a meeting with a landowner (Appendix F). The language is appropriate for someone reading at the fourth to sixth grade level. In contrast, the second set of publications, called *Tree Tips*, is brief fact sheets. All points are explained in short sentences and are illustrated with line drawings, directing landowners towards the next steps and providing further sources of information (see Appendix F)

V. Evaluating The New Low Literacy Materials

Qualitative interviews were conducted with agency personnel and landowners to evaluate the new forestry outreach publications.

A. Methods

Evaluation of the outreach materials was conducted in three of the seven counties targeted for the SARE research: Brunswick County, Virginia and Northampton and Robeson Counties in North Carolina. Qualitative semi-structured interviews were used because this method allows for unexpected discussions, gives respondents more control over the interview direction, and allows for flexibility for the interviewer (Mason 2002).

A protocol structure was developed to ensure that both respondents and interviewer were able to stay more or less on target. This protocol included both open- and closed-ended questions that could be adjusted appropriately for each respondent (Knight 2002). The respondent and interviewer ultimately determined the length of each interview; most interviews lasted one hour.

Interviews were neither recorded nor videotaped for several reasons. First, the interviewer was associated with a state institution (North Carolina State University). Some minority populations distrust government agencies and representatives, in part due to poor treatment and past discrimination (NACD, et al 1994). Secondly, there is always a risk that respondents will be less open in their answers when taped.

Qualitative interviewing and open-ended responses (as well as a small sample size) increase the risk of respondent identification. To preserve confidentiality, 1) each respondent was assigned a random, unique five digit identifying number, 2) data were

stored securely in a locked cabinet, and 3) the presentation of data has been written in aggregate terms so as not to identify any respondents.

Each county sample consisted of two sets of respondents. The first set were extension and other agency personnel (i.e., NRCS), who were treated as key informants. The second group consisted of landowners identified by members of the first set, Sustainable Woodlands project investigators, and/or tax records from each county. In general two key informants and three landowners were interviewed in each county, resulting in 15 total interviews.

Key informants were typical of the workforce in government agencies such as USDA and NRCS. All of the key informants were Caucasian. Only two of these were female. Ages range from 26 to 65.

The sample of landowners was drawn based on limited resource landowner characteristics. Most were minorities (3 African-Americans, 3 Native Americans, and 2 Caucasian) aged 46 to 65. Four were male. All landowners were above the age of 46. Land ownership consisted of 100 acres or less. The minimum acreage was about six acres, and the maximum was at 282 acres. Half of the landowners owned 100 acres or less. Although these landowners could be characterized as limited resource, they were not necessarily underserved. Each landowner had received some type of assistance (technical or financial; county, state, or federal) (see Appendix E).

B. Results Obtained From Interviews

1. Tree Tips

Comments were sought on:

- **Font size.** Six out of seven landowners think the font for *Tree Tips* is appropriate for users. Four key informants and one landowner made the distinction between the font for *Getting Help* (at size 14) and the rest of the *Tree Tips* (font size 12), or mentioned using a larger font than 12.
- **Color.** All respondents were happy with the amount of color used in the *Tree Tips* publications. Two were cognizant of the amount of color used and budgetary constraints.
- **Illustrations.** Most respondents (10) consider the amount and quality of pictures to be satisfactory (aside from pictures identified as problematic by project personnel—the picture of the family and deer).
- **Reading levels.** All but one respondent feels that the reading level is appropriate.
- **Comparisons between the *Tree Tips* set.** In ranking the reading level, four out of seven landowners said that the publications are equally easy (in some manner). Other responses were varied. Four out of six key informants believe *Goods* is easier to read than any other *Tree Tips* publication. In terms of importance, 11 out of 15 respondents feel that *Getting Started* is more important than any other publications. Ten believe *Goods* is the least important of the *Tree Tips* publication.
- **Specific publications**
 - *Goods from Your Woods:* When asked if the non-traditional forest products (NTFPs) listed in the *Goods from Your Woods* publication are viable options, key informants responded that the options are site or person specific (i.e. older landowners may not be able to undertake some

of the more strenuous alternatives or that this audience may lack the people skills or creativity). Although landowners were not asked this question, many spoke of doing one or several of these (with the exception of the easements). Both groups believe that creating stand-alone publications for some of the options is necessary, namely hunting leases, pinestraw production, and recreation.

2. Woods Wise

Responses to *Woods Wise* were collected in a similar manner.

- **Font size.** Eleven respondents think that the font for the *Woods Wise* publication is appropriate.
- **Color.** Nine respondents agree with the amount of color in the *Woods Wise* publication. Five do not like the brown color (the 10 others made no reference to this). One respondent elaborated saying that she believes the brown does not have the highlight effect that the green from the *Tree Tip* has because it blends with the black type.
- **Illustrations.** Six out of eleven respondents think the illustrations are good. The others believe the illustrations need some improvement (some of these were in response to illustrations already identified as problematic by research personnel). One landowner, seemingly recognizing our intention with the family picture, noted the importance of getting kids involved. Another landowner commented that the family looked sad. He equated this sadness with a “bad” forest and stated that a “good” forest, one bringing in money, would make them smile. One key

informant thinks it might be necessary to add captions to these pictures because they are more conceptual than pictures in *Tree Tips*.

- **Reading levels.** Nine respondents believe the reading level for the *Woods Wise* is appropriate. Five think that this publication offers more detail than do the *Tree Tips*, but is still understandable. The same respondent who indicated that the reading level was too low for the *Tree Tips*, also indicated the level was too low for the *Woods Wise* publication.
- **Quality of information.** Eleven respondents feel that the amount of information and the explanation of the forestry material is appropriate for the *Woods Wise* publication except for three who think that more detail needs to be added (for example, adding ranges of years for rotation length). Many key informants commented that given their lack of forestry knowledge, they feel more comfortable with the concepts or feel that they have learned something new.

Respondents were asked about preferences for new publication topics.

Responses from landowners include reforestation/regeneration, soils, and pests/insects.

Other suggestions from both groups included pine management, timber stand improvements, water quality issues, wildlife, and cost share information. Surprisingly, no respondents mentioned heir property issues, although, this was a prevalent theme in most interviews. For example, most landowners discussed sharing land with siblings, buying land from siblings or leaving land to children. One key informant even spoke of the frustration of consulting foresters when working with limited resource landowners due to becoming entangled in multiple heirs.

C. Other Comments on Proposed or Current Publications

Respondents were also questioned about some of the other products being developed by the Sustainable Woodlands project:

1. Glossary of Forestry Terms

One proposed product is a glossary to accompany the *Tree Tips* or *Woods Wise* publications, or exist as a stand-alone publication. This glossary will provide non-technical definitions for forestry or other technical terms that landowners might need to know in communicating with forestry professionals and other personnel, as well as provide examples of ways persons working with this audience can explain technical concepts. Illustrations would accompany most definitions to aid in comprehension.

Eleven respondents think that the glossary would be helpful. A landowner said it would just be more to read and probably wouldn't be any more helpful than the publication. A key informant, whom is familiar with the existing forestry glossary available through North Carolina Cooperative Extension, suggests that this publication be revised to meet the needs of the target audience. Two key informants argued that the glossary would not be helpful, and as a landowner had stated, would be more to read.

2. Contact Information Poster

The Sustainable Woodlands project has also created a desk-sized blotter illustrating appropriate contacts for commonly asked questions. It displays typical forestry questions and the local, state, and/or federal agencies from which landowners may seek assistance in answering their questions. This tool has been designed for agency

personnel. The contact information may also be accessed through the Sustainable Woodlands project website (www.ncsu.edu/woodlands).

Key informants seem to like this product. Several mentioned that their agency had general organizational charts that looked very similar to this one. After being given a moment to examine the chart all said they would feel comfortable using this to help landowners get an answer to their forestry question. One key informant suggests that the chart be adapted for Virginia.

Six out of seven key informants feel that the color scheme was essential to maintaining visual understanding of the chart, so as not to “get lost in all of the boxes”. Many agreed that the document would be even more helpful online, but noted that that would not be helpful for the target audience.

Several key informants provided suggestions of additional agencies and organizations to add to the chart. A recurring issue was adding contact information for each agency. Solutions to this problem included adding another strip at the bottom of the blotter to accommodate contact information; adding extra space to the boxes (either at the top of the chart or the bottom of the chart to let each person write in their own personalized contact information; or to add contact information in the margins of the blotter or adding more margin space so that each person could write in contact information.

D. Distribution of Publications and Other Forestry Information

Creating useful publications is only half the battle in meeting the needs of a specific audience. The other half is making the materials readily available. Key informants suggest additional pathways through which distribution can be increased,

including the Nature Conservancy, local forestry associations, libraries, tax assessors, Registers of Deeds, Farm Service Agency offices, and NRCS. A couple of key informants expressed frustration in getting limited-resource landowners involved yet were not able to suggest appropriate social organizations or support groups at the time of questioning.

Landowners were asked how they learn about local community events. The most prevalent answer was that landowners hear about events by ‘word of mouth’. Two examples were provided: 1) chatting in a local restaurant or other location where people gathered¹ and/or, 2) speaking with a specific person (i.e. neighbor, relative co-worker, etc).

Other methods of communication include local and regional newspapers, advertisements and posters, church, and television. One landowner stated that he received most of his information by the internet (see Appendix E).

VI. Discussion

Limited resource and traditionally-underserved landowners are not as likely as other non-industrial private forest landowners to take part in extension and other educational programs (Warren et al, 2001). Special programs and delivery systems are needed to help these landowners more fully utilize their resources (Mississippi State University Extension Service 2001). Through new programs and the appropriate educational and outreach materials, these citizens can move from “underserved” to “served” (Mississippi State University Extension Service 2001).

¹ In Robeson County two separate mornings were spent in two separate Burger Kings. In each, 8-10 men gathered to eat breakfast, share news and stories, and joke with each other. Most of these men were retired, although some were employed and had to leave the groups early, or were self-employed. The men knew many of the faces coming into the restaurant and were familiar with many of the names brought up in conversation.

Based on internet searches, it was revealed that most extension resources that are specifically tailored to limited resource and underserved audiences are in areas of health and nutrition. Of the forestry materials developed for this audience, most have been primarily workshops (i.e. the Mississippi Underserved Forestry Landowner Program). There are few written forestry materials available to this audience (LLPP 1997 and Winrock 1998). There are many resources already available that provide guidance in producing written materials for a low literacy audience including extension publications. For example, these publications explain that materials should be developed to both meet the educational needs of the audience and be sensitive to the cultural significance of terms and images (National Cancer Institute 2004 and Kurzynske and Stivers 2004). The publications developed for this project are among the first that put these guidelines into practice for forestry materials in the Southeast.

In a presentation about the “Underserved Forestry Landowner Program” in Mississippi, Mark Measells shared the success of their publicity efforts. Sixty five percent of their respondents indicated that they had heard about the workshops through letters to the landowner (Measells and Grado 2003). Mr. Measells commented that landowners may have heard about the program through other means, but the letters are what the landowners noticed. Fifteen percent of their respondents indicated that a personal contact is what brought them to the programs (Measells and Grado 2003). Newspaper articles as a method of communication had the next largest group of respondents at 12% (Measells and Grado 2003). Given these results, as well as the results of this research and preliminary results from the Sustainable Woodlands survey (Sills 2004), it appears that an effective way to reach this audience is through some form

of personal contact, whether it is through some type of face-to-face contact or in the form of a personal letter. Materials written at an appropriate reading level can complement this face-to-face contact. One of the extension agents interviewed says the limited resource landowners that he often works with, “. . . need something in their hands, but also need some personal review, some personal contact. I often take a highlighter to highlight important passages for them” (Respondent 13692 2004). Distribution and creation of materials should involve social and support groups and churches that serve minority and underserved landowners. Local “hang outs” may have rich human capital that is currently untapped. These resources may help extension agents make more personal connections with landowners. Extension will have to be more proactive (Hoorman 2002, Cobourn and Donaldson 1997, Shauber 1994, and Couchman and Williams 1994). Given the programs and materials that have been created by extension for health and nutrition, forestry personnel could look to these programs for lessons on how to effectively use low literacy materials.

Leroy Davis, a professor in the Department of Agricultural Economics and Agribusiness at Southern University, writes that the 1890 land grant institutions (historically Black colleges and universities) are best able to meet the needs of limited resource and traditionally underserved landowners (Davis 1991). However given the lack of resources, Davis (1991) suggests greater collaboration between the 1890 and 1862 land grant universities. He further suggests new incentives for extension and land grant personnel to reach out to limited resource landowners. These incentives could be extended to those who should have more direct contact with limited resource forested landowners—consulting foresters. Materials such as the ones developed under this

project could be used with training programs for these foresters in order to help them learn the type of language and behavior that is most likely to help them connect with this audience.

The evaluation of current materials provides useful guidelines for development of new materials. These new materials should be specially tailored for these audiences, and include topics such as heir property issues, sources of financial or technical assistance, timber marketing and environmental and wildlife issues (Mississippi State University Extension Service 2001). Much of the forestry information available online covers these topics, with the exception of heir property issues. Thus, one feasible approach to developing new publications is simply to revise existing materials.

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Box 1: USDA Definition for Limited Resource Landowner

A Limited Resource Farmer or Rancher or Forest Owner is:

1. A person with direct or indirect gross farm sales not more than \$102,400 in each of the previous two years.*
AND
2. A person with a total household income at or below the national poverty level for a family of four or less than 50 percent of county median household income in each of the previous two years.**

* This value will be increased beginning in fiscal year 2005 to adjust for inflation using the "Prices Paid by Farmer Index" compiled by NASS.

** Total household income will be determined annually and indexed for inflation using Commerce Department Data.

United States Department of Agriculture
http://www.nrcs.usda.gov/programs/smlfarmer_v2/LRP-D.htm

Box 2: NRCS Definition To Further Classify Limited Resource

While some farmers may aptly be described as “socially disadvantaged,” this term is also useful for characterizing potentially underserved non-*farm* people and communities.

Socially disadvantaged persons are defined by USDA as:

A group whose members have been subject to racial, ethnic, or gender prejudices because of their identity as members of the group without regard to their individual qualities. Socially disadvantaged groups consist of women, African-Americans, Native Americans, Alaskan Natives, Hispanics, Asians and Pacific Islanders. National, state and regional census data includes information about the racial, ethnic and gender characteristics of residents.

Certain project areas (e.g., counties, municipalities or watersheds) may be characterized as “disadvantaged” based on the economic characteristics of the residents.

According to Circular No. 4 of the National Watersheds Manual, disadvantaged communities and groups have the following characteristic:

1. Average value of *property* is less than 75 percent of state average values.

In addition, either of the following characteristics is present:

2. The average *per capita income* for the last three years is less than 75 percent of the national average.

OR

3. Current *unemployment* is twice the national average for the past three years.

United States Department of Agriculture, Natural Resources Conservation Services

Compiled by Jody Rendziak, 1998

http://www.ssi.nrcs.usda.gov/publications/2_Tech_Reports/T005_OutreachDefinition.pdf

Table 1: Demographic Characteristics of Study Counties

	High school grad and above	Families below poverty	In farms	Minority
Brunswick, Virginia	63.2	22.8	22	58
Northampton	62.5	21.3	47	61
Robeson	64.9	16.5	47	67
North Carolina	78.1	12.3	0.3	28
United States	80.4	9.2	0.9	23

Figure 1: Per Capita Incomes for Study Counties (Source: United States Census Bureau. "State and County Quick Facts." <http://quickfacts.census.gov/qfd/>)

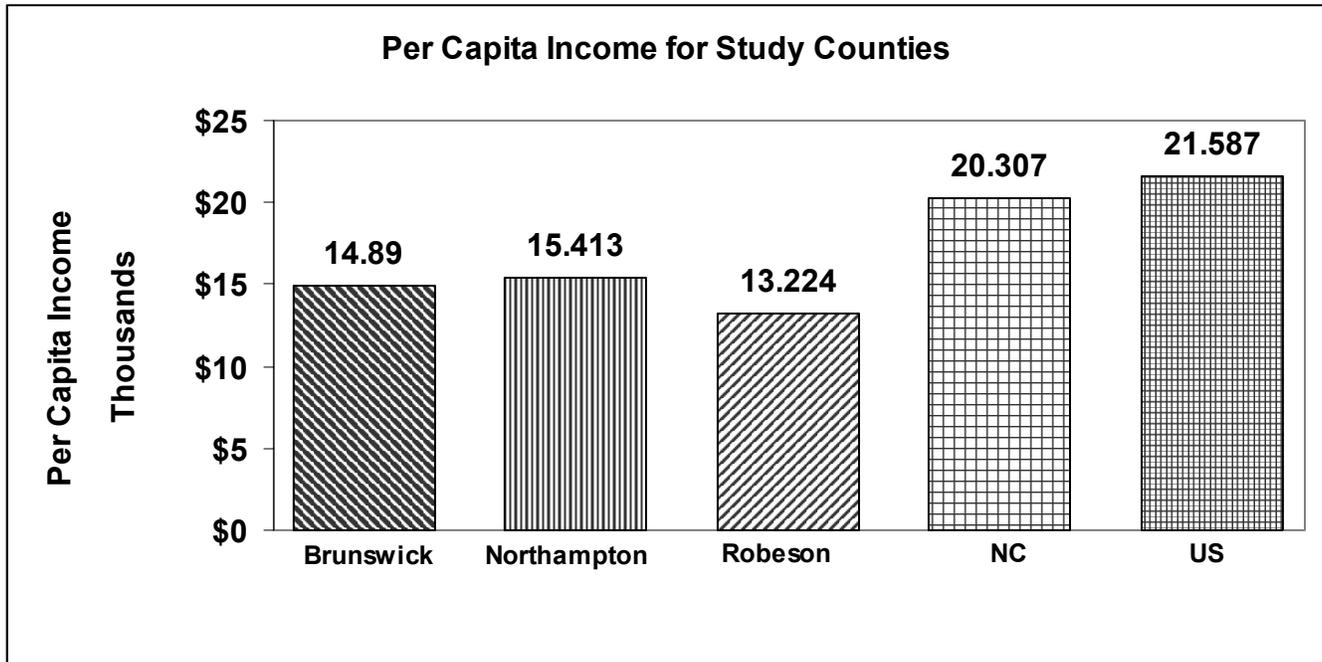


Table 2: Brief Definitions of Reading Levels as Defined by the National Adult Literacy Survey (Seidow 1998 and Kaestle et al. 2001)

Levels and Score Ranges	Percentages at Each Level in the U.S.	Sample Prose, Document, Quantitative Tasks
Level 1	21 - 23 %	P: Locate single piece of information stated in short text. D: Locate or enter specific information on a form. Q: Perform single, simple, specified arithmetic operation from numbers provided.
Level 2	25 - 28%	P: Make simple inferences, integrate easily identifiable information. D: Cycle through or integrate information from parts of document. Q: Perform single operations using easily located numbers.
Level 3	33%	P: Make literal, inferential matches; integrate information from long, dense text with no headings. D: Integrate information from one or more documents: select appropriate information. Q: Perform multiple operations from two or more given numbers.
Level 4	15 - 17%	P: Integrate or synthesize information from complex or lengthy passages containing conditional information. D: Perform multiple-feature matches, integrate information, make inferences through documents. Q: Perform two or more sequential operations inferred from information on numbers appearing in numerical displays.
Level 5	3 - 4%	P: Search for information in dense text with distractors, make high-level inferences, use specialized background knowledge, contrast complex information. D: Search through complex displays, make high-level inferences, use specialized knowledge. Q: Perform multiple operations sequentially, inferring features from text or background knowledge.

Figure 2: Literacy Levels for Study Counties (Source: National Institute for Literacy (NIFL) <http://www.nifl.gov/nifl/>)

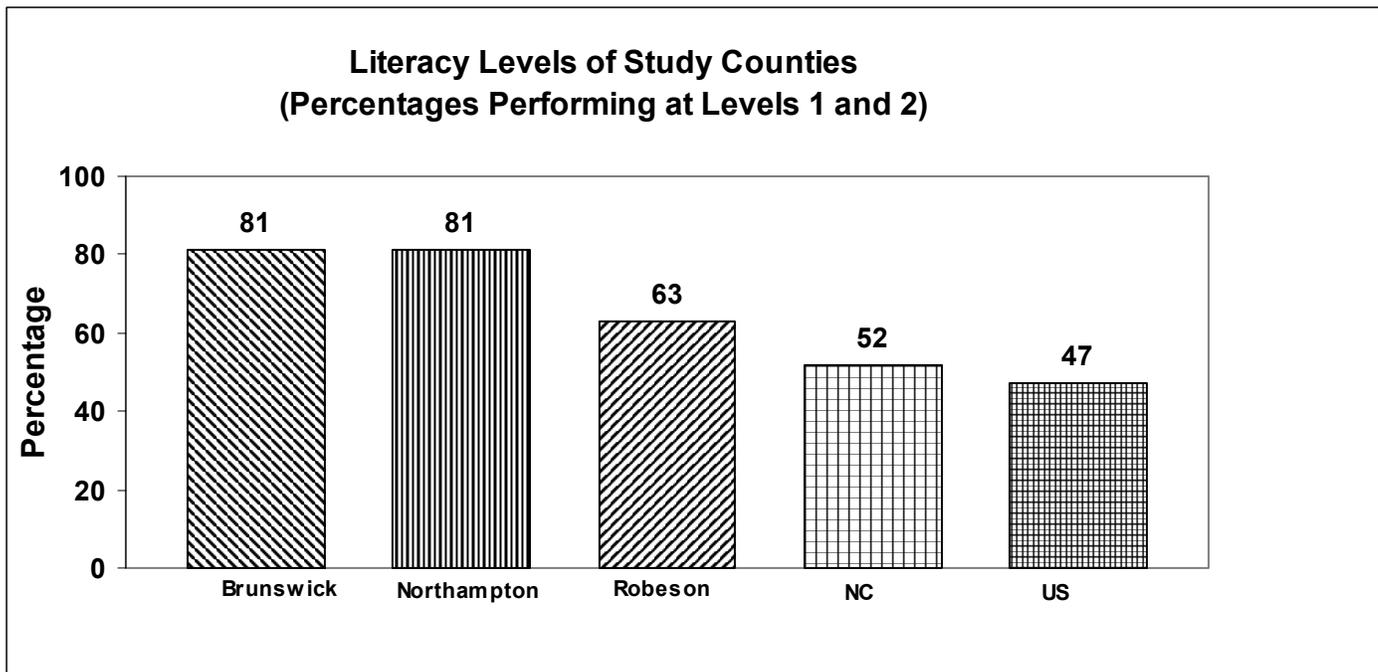


Figure 3: Literacy Analysis of North Carolina Forestry Publications (Sources: <http://office.microsoft.com>; <http://www.usingenglish.com>)

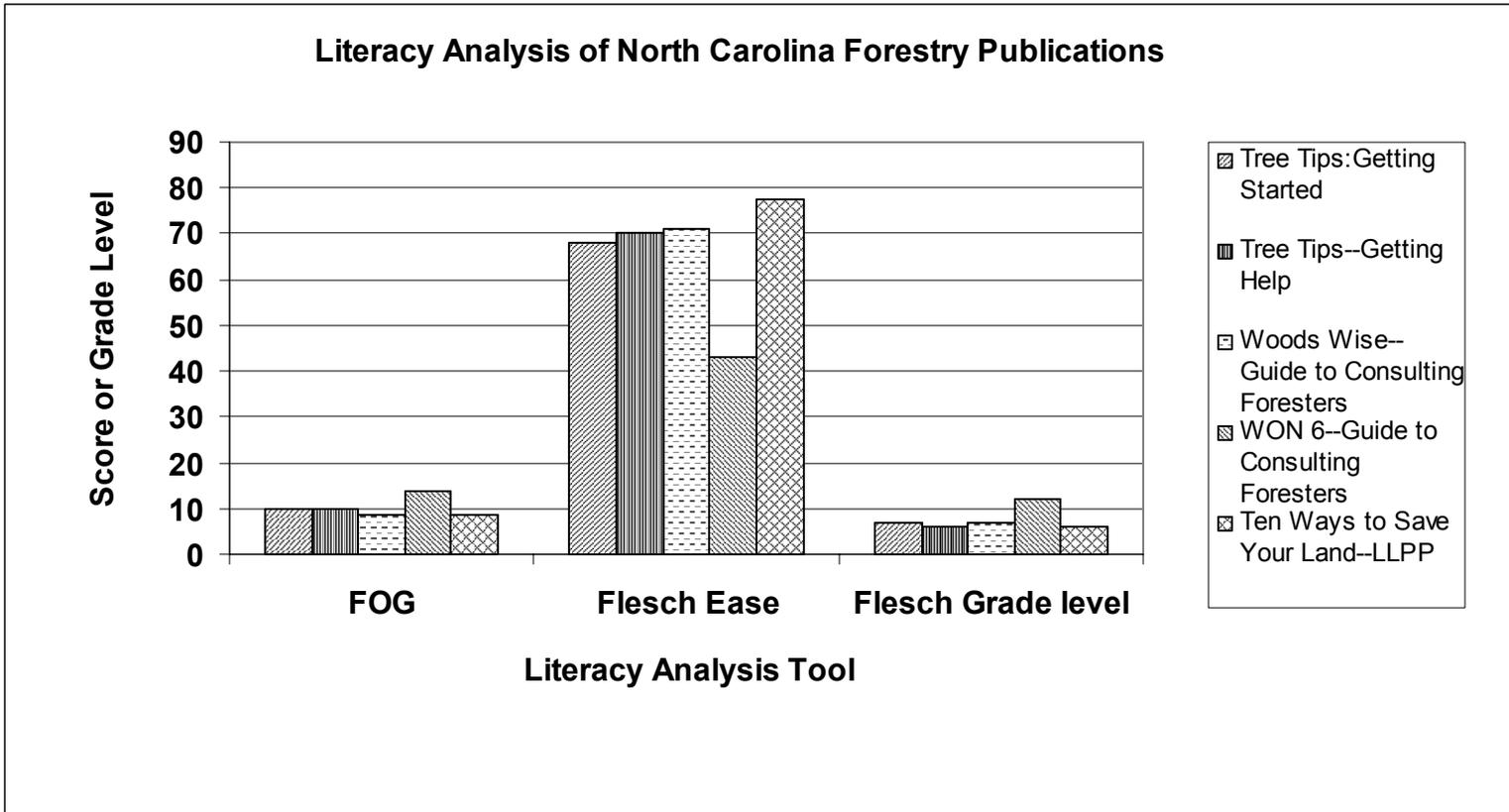
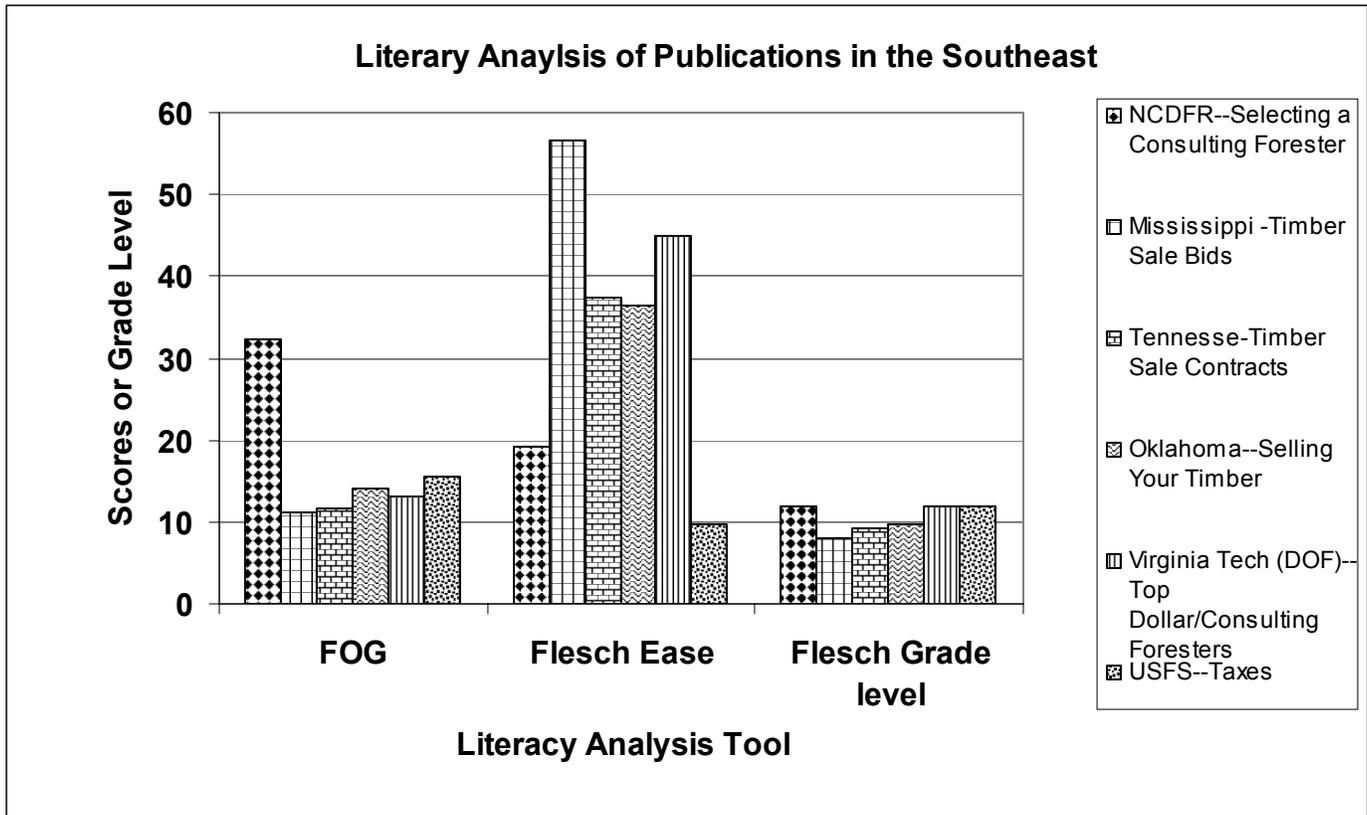


Figure 4: Literary Analysis of Some Forestry Outreach Publications Available in the Southeast (Sources: <http://office.microsoft.com>; <http://www.usingenglish.com>)



Box 3: Text Samples from Tree Tips, Woods Wise and Woodland Owner Notes

<p>Excerpt from Woodland Owner Notes <i>A Consumer's Guide to Consulting Foresters</i> (CES 1995).</p> <p>Professional foresters can provide landowners with management assistance that will increase the value and productivity of their forested acreage. More than 60 percent of North Carolina is forested, but much of this valuable resource is poorly managed or not managed at all. Many forest landowners are not aware of the benefits that can be derived from a properly managed forest - extra money from the sale of timber products, improved wildlife habitat, aesthetics, and recreation, and pride in ownership. Consulting foresters are one of several sources of assistance for landowners who are interested in managing their woodlands.</p> <p>What Is a Consulting Forester?</p> <p>A consulting forester represents, for a fee, the best interests of his clients in all matters concerning the forest. A consulting forester can improve the quality of the forest environment and increase the production of marketable products. When the trees become merchantable, he can secure buyers and supervise the timber sale. The fees charged by a consultant may be based on an hourly or daily rate, forest acreage, or a contract price based on a percentage of gross revenues from the sale of forest products. The cost of services can be repaid by faster tree growth and the higher prices received for timber that is marketed correctly.</p>	<p>Readability of excerpt:</p> <p>FOG Index 13.9</p> <p>Flesch Reading Ease: 42.9</p> <p>Flesch- Kincaid Grade Level: 12.0</p>
<p>Excerpt from the Woods Wise publication <i>Guide to Consulting Foresters (Sustainable Woodlands 2004a)</i></p> <p>Here are just a few examples of how a consulting forester could help you:</p> <ul style="list-style-type: none"> • Write a plan to make your woodland more valuable and enjoyable. • Make arrangements for selling your timber and planting new trees. • Give advice about prescribed burning and thinning, or almost anything else you want to do with your woods. <p>What is a consulting forester?</p> <p>Consulting foresters help landowners plan and manage their woods. They are <i>consultants</i>, so you have to pay them. They are <i>foresters</i>, so they know how to take care of trees and the rest of the forest – like the soil, streams, and wildlife. In North Carolina, they are registered with the state.</p>	<p>Readability of excerpt:</p> <p>FOG Index: 9.10</p> <p>Flesch Reading Ease: 71.8</p> <p>Flesch- Kincaid Grade Level: 6.1</p>
<p>Excerpt from the Tree Tips publication <i>Getting Help from a Consulting Forester (Sustainable Woodlands 2004b)</i></p> <p>A consulting forester:</p> <ul style="list-style-type: none"> • Helps you manage your land and trees • Is listed with the state as a registered forester • Has forestry skills and experience • Knows about forestry regulations • Looks out for what is good for you and your forest <p>How do you choose a consulting forester?</p> <p>All registered consulting foresters have basic forestry skills. Some foresters have specialties like managing for wildlife or pine straw. Before you hire a forester, you should:</p> <ul style="list-style-type: none"> • Talk to a few foresters, and ask them about their specialties. • Ask what they will do and how much it will cost for their help. 	<p>Readability of excerpt:</p> <p>FOG Index: 9.86</p> <p>Flesch Reading Ease: 70.0</p> <p>Flesch Grade Level: 6.1</p>

XI. Appendices

Appendix A: Sustainable Woodlands Project Objectives

Appendix B: Literacy Indicators And Evaluation of Existing North Carolina Forestry Outreach Publications

Appendix C: Publication Review Form

Appendix D: Flesch Tools Equations

Appendix E: Interview Responses

Appendix F: *Tree Tips* and *Woods Wise* Publications

Appendix A: Sustainable Woodlands Project Objectives

Objectives:

The four major objectives of this project support sustainable management of woodlands by client landholders. The project clients are limited-resource, traditionally under-served landholders, including black, Native American, and female, both resident and absentee, in selected counties of eastern North Carolina and eastern Virginia.

Objective 1 is to develop and apply methods for identifying and contacting landholders.
 Objective 2 is to describe and analyze the preferences, opportunities, and constraints that inform decision-making about woodland management within farming systems.
 Objective 3 is to analyze and select technically proven options for woodland management that are sustainable and appropriate to farm family goals and economic systems.
 Objective 4 is to extend these options to the client population through education and outreach.

The primary activities under Objective 1 will be to generate a sampling frame, administer a survey on decision-making by client landholders, and evaluate the chosen and alternative methods for identifying client landholders. The results will inform Objectives 2 and 3.

For Objective 2, the multidisciplinary project team will focus on client landholder decisions to manage for and market forest products and services, evaluating the impact of access to information and training about silvicultural and management techniques, input markets for credit and forest management services, and output markets particularly for emerging non-timber products and services. Other factors likely to be important include environmental regulations and incentive plans, availability of material and labor in the farming system, financial flows over seasons and years, and tenurial status such as use rights, heir-property, mortgage liabilities, absentee ownership, and tax schedules.

For Objective 3, the research and outreach team will consider practices for pre- and post-harvest management, reforestation and wood certification programs, cooperative structures, as well as interim and alternative woodland income strategies such as game/hunting leases, pine straw collection, subsidized conservation easements, wild plant supply to nurseries, and small business opportunities. Methods of integrating woodland management with crop and livestock systems will also be considered. Priority will be given to options that: complement crop and livestock components of farming systems; are profitable on small landholdings or can be implemented cooperatively; supply growing non-timber product markets; are eligible for existing and proposed incentive programs; and enhance ecological and economic sustainability of diverse farm systems.

For Objective 4, the research team will provide outreach guidance to agencies, private voluntary organizations, and corporations that oversee sustainable and diverse farming system initiatives, through continuing education programming and other information dissemination. Case study families will host on-farm demonstrations of management options selected based on research findings about landholders, markets, and incentive programs. Other outreach activities will include workshops or field days that highlight the on-farm demonstrations and a pilot information campaign about available support and incentive programs for woodland management and markets.

Sills, E. and Warren, S.
www.ncsu.edu/woodlands

Appendix B: Literacy Indicators And Evaluation of Existing North Carolina Forestry Outreach Publications (Saunders and Dawson 2003)

Title		Titles of Publications					
		Financial Incentive for Forest Management	Consumer's Guide to Consulting Foresters	Where to Go for Forestry Assistance	Forest and Wildlife Stewardship	Timber Sales Agreements	Before You Sell Your Timber
WON #		4	6	3	27	10	19
rate 1-5							
organization	levels and sublevels	5	5	5	5	5	5
	practical information	5	5	5	5	4	5
	logical order	5	5	5	5	3	5
	summaries	2	4	1	5	3	4
language/style	easy sentence structure	3	4	5	5	3	3
	short paragraphs	3	4	1	5	5	3
	active voice	3	5	5	5	5	5
	complete sentences	5	5	5	5	5	5
	repeat new information	3	4	4	5	3	4
	define jargon	3	5	2	5	3	3
	avoid synonyms	5	5	5	5	4	4
	positive statements	5	5	5	5	4	4
	clear nouns	5	5	5	5	5	5
	no contractions	5	5	5	5	5	5
design	unjustified right margin	1	1	1	1	1	1
	large text	5	5	5	5	5	5
	no ALL CAPS	4	5	5	5	5	5
	big or bold headings	5	5	5	5	5	5
	white space	3	3	4	N/A	N/A	3
	illustrations close to relevant text	1	1	1	5	5	4
overall	level of vocabulary	2	3	5	5	2	1
	white space	3	3	2	N/A	N/A	1
	overall readability	2	4	5	5	2	3
Fog index	Number of words in passage	113	107	84	105	103	109
	Number of sentences in passage	5	5	5	5	5	7
	Average words/sentence	22	21	16	21	20	15
	Number of hard words	6	4	6	6	6	5
	Grade Level	11.2	10	8.8	10.8	10.4	8
	Number of words in passage	103	118	104	109	91	98
	Number of sentences in passage	6	5	6	7	4	4
	Average words/sentence	17	23	17	15	22	24
	Number of hard words	12	8	8	7	6	3
	Grade Level	11.6	12.4	10	8.8	11.2	10.8
	Number of words in passage	100	95	102	98	109	104
	Number of sentences in passage	5	5	4	5	7	4
	Average words/sentence	20	19	25	19	15	26
	Number of hard words	4	3	14	4	10	5
	Grade Level	9.6	8.8	15.6	9.2	10	12.4

Appendix C: Publication Review Form

Review of TreeTips and WoodsWise Outreach Publications

As you review the publications, please pay particular attention to the following components.

You can use any or all of the following three ways to provide input:

- (1) Use this form to rate publications on each component, on a 1 to 5 scale, where 5 = perfect and 1 = unacceptable;
- (2) Send an email or attachment listing your comments, suggestions, and changes;
- (3) Use the *Track Changes* tool in Microsoft Word to edit the document.

Remember, Tree Tips are written for a 5th grade literacy level and Woods Wise are written for an 8th grade literacy level. Thanks for your help!

Publication title:

Appearance/ Format

- Documents follow a consistent design theme.
- Fonts and graphics contribute to the overall understanding and flow of the information, help to move the eye from main topics to supporting details, and create a pleasant viewing experience.

Organization

- The page layout is clear and easy to follow.
- Headings contribute to the overall understanding and flow of the information, and help to move the eye from main topics to supporting details.
- There is a logical progression of information.
- Grammar and vocabulary are appropriate for each literacy level and contribute to clarity and style.
- Each document is an appropriate length.

Content/ Concept

- All information is relevant to limited-resource landowners in the coastal plain of NC.
- All essential information pertaining to the topic is presented.
- All presented information is current and correct.
- The content is covered in depth without being redundant.
- The information is presented in a clear and succinct manner that contributes to comprehension.

Appendix D: Flesch Tools Equations

Flesch Reading Ease formula

$$206.835 - (1.015 \times \text{ASL}) - (84.6 \times \text{ASW})$$

where:

ASL = average sentence length (the number of words divided by the number of sentences)

ASW = average number of syllables per word (the number of syllables divided by the number of words) (Microsoft Corporation 2004).

Flesch-Kincaid Grade Level Score formula

$$(.39 \times \text{ASL}) + (11.8 \times \text{ASW}) - 15.59$$

where:

ASL = average sentence length (the number of words divided by the number of sentences)

ASW = average number of syllables per word (the number of syllables divided by the number of words)

Microsoft Corporation 2004

<http://office.microsoft.com>

Appendix E: Interview Responses

Landowner Responses

Table 1: Tree Tips

“Tree Tips” Color: “Green Stands Out And Is Eye-Catching”
I don't see anything wrong with it. It's not too much color. Green stands out
Looks very attractive to me. You're green. Green means go.
Okay (4)
Better than black and white but recognize printing budget. Enough color to be eye catching and interesting
Fine. You might put lots of color on first page to attract attention
“Tree Tips” Font: “Comfortable to read”
Comfortable to me with cataract eyes. It's not too big. Big print for subjects (headings) is good. Bold stands out.
They're okay with me. That's what glasses are for
I can read it
“Getting Help” is larger, better to see
Good
My eyes are getting dim, but I can see this. If you made it any bigger, you'd use a lot of paper.
The font size is right on the money
[1 unasked]
“Tree Tips” Illustrations: “6/6 Say Good Illustrations That Match The Simplicity Of The Writing”
Yes I can tell what each picture is. Identified some pictures
Good illustrations. There's nothing outstanding that I wondered what it was.
Could not identify picture of firewood on “Goods”. Suggests not to connect logs to stump.
Could have some improvement to picture of family (faded). Maybe add about 5 or 6 more pictures
Illustrations go along with the simplicity of the writing
They look good (3)
“Tree Tips” Reading level: “Written At a Level That Everyone Can Understand”
It looks like it's alright to me.
Its about right
Written at a level that everyone can understand. Some people may think it's too simplistic, but better simplistic than too complex.
I can read it (read a few sentences)
Its very basic
I can read it
I think it explains what its supposed to

Average person wouldn't have a problem with it.
“Tree Tips” Amount of information: “I think its reasonable, 2 Suggest Additions”
What degree of info are you trying to get in peoples' hands? If you have a lot of info it people with short attention spans won't read it. ““Getting Help”” sounds like a fine package of ideas that are important. Topics are relevant.
I think its okay
This is good. Its not too much
Good
I think it's pretty reasonable. I don't think its too much
Few suggestions: For “Goods” maybe add recipe. Describe how to fold grapevine to make wreath/assemble. Where to get stuff to put on it (craft store).
Maybe add housing info for absentees (people from city who move to property for residence)—Who to contact, what are some options, what are you going to use your land for; other county issues—rabies, dogs acquire taste of blood→ hunters leave carcass in woods or leave hunting dogs they don't want to care for—become wild dogs
Add info about small business loans, for example, molds for painting soldiers cost \$200—start-up money.
Expand with drawings of examples of flowering shrubs, bamboo, magnolia, mountain laurel.
[1 unasked]
Ranking “Tree Tips” Reading Level (1 being the easiest): " 4/7 Say They're Equally Easy”
1 “Getting Help” 2 “Getting Started” and “Goods” (2)
All about same level (3)
1 “Getting Started”: both in terms of content and the way it reads 2 “Getting Help”: follows close behind “Getting Started”. Makes reference to some things that people may not know about 3 “Goods”
1 “Goods” 2 “Getting Help” 3 started
[1 unasked]
Ranking “Tree Tips” Importance (1 being the least important): “Getting Started” is Most Important, “Goods” is Least Important”.
1 “Getting Help” 2 “Goods” 3 “Getting Started”
1 “Goods” 2 “Getting Help” 3 “Getting Started” (4)
1 “Goods” 2 “Getting Help” is the next logical step after “Getting Started”, then add on to “Goods”— but depends on how serious a landowner is about managing their woodland 3 “Getting Started”
People are taking better care of their land. They're all important. It's all about the dollars. When you're about to sell your timber you're looking for the money. It's important about the boundaries. I've seen people cut their land. Seen people get hurt by

going over a boundary. Some people don't have boundaries marked and don't know. Should be compensated (if cut on adjacent land)
3 "Goods" "Getting Help" and "Getting Started" equally imp. Got more on one page with "Goods". Better if you can get more on one page so don't have to flip over.
Glossary: "7/8 Say It Will Be Helpful To Explain Things"
It would. I would think so. The more information the better.
Wouldn't hurt [he referred to poplar as softwood]
Dictionary is always helpful
Yeah that'll be fine. It will be helpful to explain things
Useful especially for landowners and those who want to know some things before they go to talk to someone else, especially women. Women are often dismissed. They don't think of themselves as forest landowners or having a resource. They may even pick up the glossary without having picked up the publications just because someone has been talking to them. Some may think it's too simplistic, but thinking about women—some don't know the difference between types of pine. You could explain things in reference to crafts, like "white pine has beautiful fan of needles".
Since I love the woods and I deal with it, I'm familiar with these words. Some people might not be
It certainly wouldn't hurt
It's just something else I'd have to read

Table 2: "Goods From Your Woods"

"Goods" Options as Independent Publication: "Hunting and Pinestraw"
15 year contract with government—longleaf \$50/acre (can't remember name of assistance). Hadn't thought about selling plants. Hunting leases good idea.
Particularly like "Goods". Some may not be aware of things to make money. This gives them ideas. Landowners may not have thought about pinestraw or do not know that there is a market for it. Maybe tell different ways to bundle it and to make sure that there are no cones. Tell where to make contact (buyers?). Some people are crafty by nature. Others may not think about it that way. They can even sell plants to crafters.
Make one for hunting. It's big business around here. Landowners may not know how to negotiate a lease or draft a lease. Give them a sample. Discuss liability issues and insurance.
I lease land to rake pine straw. \$100/acre on state land. \$60-75 is the average paid (on other land). This area not like Raleigh (farmer's market), but it's coming up—Lumberton Farmer's Market not successful. Been around about 3 years. \$7-8 million invested by state. We sell produce "roadside". Advertise pinestraw in newspapers.
No options that I wouldn't do. You can get about \$15-20 load for firewood. About everywhere now you have to lease land to hunt. We don't lease land. We have a large

family so hunt ourselves. Not used to seeing leases, no trespassing signs. Now you have to pay taxes on it. From 20 years ago its almost double.
Not enough people to sell plants to make crafts. Tried selling produce to man w/ 6 convenience stores, but he wanted 30-40 bushels, not the 5 or 6 that I had
Selling produce only viable if only farmers market—not one in Lawrenceville (used one in South Hill and did okay). People have the perception that if you live on a farm, the product should be free (given away), like it didn't cost you anything to produce (costs time, sweat, seeds, etc); lots of people already know somebody with a garden so they get their produce that way; no traffic on Fxxxxxxx Lane or even Hwy XX to sell roadside. Issues with licenses to sell, permits; need physical site or website to promote/advertise
Hunting, pinestraw
I would be interested in pinestraw
Good options
[1 unasked]

Table 3: “Getting Help” and “Getting Started”

“Getting Help” Government Pages: “No Government Pages in the Phone Book”
No government pages (blue pages) in phone book. Listed under Robeson County and North Carolina agencies (looked through phone book).
No blue pages. Not listed in yellow pages. Have trouble fining in phone book (Northampton)
We don't have blue pages (Brunswick)
[5 unasked—all counties accounted for]
“Getting Started” Tax Assessor and Register of Deeds information: “4/7 Say They Aren't Sure”
No, I don't think its too much information. Deeds info correct
Tax assessor/register of deeds info: tax assessor may not have map; found property located in plat books at circuit court
Not sure if agencies located together in County Service center in Lawrenceville
Yes, but I'm not sure
Yes
[3 didn't know]
[1 unasked]

Table 4: *Woods Wise*

“Woods Wise” Color: “Good amount of color, But 2/8 Say No Brown”
Blue is my favorite color. The color of this is the color of my arms. It's camouflaged with my arm. Not attractive.
Good (3)

I don't like the brown
Okay. It looks like the same amount as the others, just brown
It suits my fancy very well
Like the wood rings in the Os of 'Woods'. Good amount of color
"Woods Wise" Font: "It's a Good Size"
Same as others
Large enough. I can see it very well. Looks very good.
Font on "Getting Help" is better
This is a good size (2)
Okay (2)
[1 unasked]
"Woods Wise" Illustrations: "4 out of 7 Say They Need a Little Improvement"
First picture inside Woods Wise looks like Bradford pear tree. SMZ looks like a road (Identified some pictures) Referred to SMZ—10 ft in VA (?)
The writing is okay, but this picture needs help. This family is looking sad. If you have a bad forest than you won't smile. A good forest brings in money.
Pictures need some color. (Identified some pictures)
This family picture is faded
It pretty much looks like the other pictures in the Tree Tips. Some of the pictures are the same
Need to get those kids involved so they know what's going on. You may not think they're paying attention, but they need to be involved
Can tell it deals with timber. Can tell what it is without captions
[1 unasked]
"Woods Wise" Reading Level: "I think it's done well"
It's not hard to read. I think it's very well done.
Okay, does appear to have a little more detail, but understandable
Worded fine
Good. Offers a bit more in depth info than others→where to go to get info, where to access info in terms of value of timber, what it's selling for
I think its good (2)
This one gives more detail than the others, but it still seems like it might be just as easy to read—same reading level
I can read this too. Its okay
"Woods Wise" Explanation of Forestry Information: "6/8 Say Its Understandable"
Can understand. Need to put " <u>WHY</u> " to get consulting forester. Cover who, what, when,

why, how
I think it's explained pretty well
Adequate to lead someone to more info. Does not give agent enough detail to assist someone without getting more info. Maybe good. Have to look for stuff on own to learn more.
Good. Again, it gives more detail than the others, but its not too much
I can understand it
Just right (2)
[1 unasked]

Table 5: Communication

Community Events: "Word-of-Mouth, TV/Newspaper, Church"
Newspaper radio word of mouth (co-worker, neighbor) church
Internet (uses internet 3-4 times a day for news); no local TV channel
Down at Linda's restaurant (word of mouth) Robesonian (newspaper) ASC office
TV (Richmond and Norfolk stations) ASCS, FSA, DFR (son works for FSA)
Church: in eastern North Carolina, it's the best way to reach this audience No local TV or radio → listen to Roanoke Rapids station or Ohoskie stations Posters at convenience stores, eating places—A good idea might be to use table tents or placemats at local restaurants
Newspaper Local TV If forestry question probably call forest service
TV and radio
I eat lunch at this place in town and hear a lot of what's going on there, or TV
Computers: "5/6 Don't Have One"
Don't own. Church bought some. Didn't have enough money for computer when remodeling home. Computer for kids
Yes. Very comfortable
Yes. Computer access in library. Senior center even teaches classes. Chowan College also teaches classes.
No (3)
Own a computer. Son mainly uses computer
Had one, but broke. Getting new one. Wife comfortable using—mostly for the kids. No internet access—plan to get with new computer
Preference of Other Forms of Information: "Workshop, Field Demonstration, or Social Gathering"
Workshop, video, field demo. The field demonstrations are done on farm tour → looked at other guy's farm down the street. He had buffers for wildlife around land. Good idea.

I'm gonna do that too. You can learn a lot from watching others.
Website→ Farm Bureau says more farmers using computers. Virtual forest to walk thru. Documentary—maybe cost prohibitive. Video possibility, try low cost VHS (humorous—Steve Erwin)
Word of mouth Newspaper Flyers Church Schools Local bulletin boards (answer more appropriate for methods to advertise)
Referred to tickets and fines for burning—read in newspaper
Years ago Black farmers used to have a big picnic at the end of the summer season. Like 'ol church meeting. Brunswick stew in big iron pots. Gathering that was social but gave opportunity for farmers to talk with agents and each other. Get people together socially with food as a way to get them there. Big family day.
A workshop might be nice
[3 didn't know]

Table 6: Focus for New Materials

Other Topics: “Reforestation/Regeneration, Insects, and Others”
1) Reforestation. When you cut that timber you need to go back and reseed it. 2) Some times the trees get disease and pests. 3) When you get to a certain age you need a road going thru it so you don't have to walk it
For inherited land—where to look (for ?), boundaries, get soil sample, zones (in terms of soil—what grows best in what soil); water purity; if lots of farming around, what pesticides are being used
Soils
Insects Get a forester to check the forest out every once in a while Check to see if the pines are growing
Publication on woodland management—firebreaks, etc., things to improve the value of the trees for a potential sale. The average landowner doesn't know how or when to prescribe burn or about thinning. CRP info doesn't go into detail about improvements for wildlife—need this info to make land more valuable for hunters
Maybe add one about recreation. This would be good because of our proximity to the Roanoke River. I think people would be interested if there's not a lot of liability issues. Some landowners wouldn't mind especially around ponds. There are lots of people on I-95. Landowners could advertise there→welcome center.
Regeneration. Natural regeneration is not a problem here, but landowners can get a more marketable stand with planting. Something should talk about the importance of replanting. Most people replant loblolly, but maybe something could explain how different types of trees are available for the market. It should also talk about how long to

harvest, loblolly vs. hardwoods
Wildlife
These are good
[1 didn't know]
Q: Other comments?
Start small and be realistic with what you plan. May get overwhelmed.
Issue with finding people to clear land (too small)
Word to the wise: have goal, but be willing to adapt as circumstances arise; have a plan B
Q7: Choose and cut option in this county? One tree farmer in Halifax County. Farmers so strapped for a way to make money. Maybe 1 out of 20 might be interested, especially those who have left the farm for another job—keeps them connected. Plus trees come from so far away that they're dry before Christmas is over.
Pinestraw production: After 8 or 9 years can rake pinestraw. Includes raking, loading, picking up limbs. Rake by hand or by tractor (if clean). Try to keep leaves out. More time spent raking pine straw than any other part of process. Can be done on own (not labor intensive). Also sell pinecones. Can't afford to cut pine because money from pinestraw so good—but replant as soon as possible. Felony (used to be misdemeanor) to rake pine straw without written permission—lots of people sneaking on land.
[5 had no other comments]

Key informant Responses

Table 7: Tree Tips

“Tree Tips” General Evaluation: “Provides Good Basic Information In Readable Format, But Adapt for Virginia”
Looks pretty good. Concerns: Check on invasive species, protected. Dogwoods and anthracnose (sp?), a problem. Don't want these to spread. Some bamboos very invasive.
Hunting Leases—VA must have leases reviewed by lawyer
Add National Wildlife Conservancy---protection is imp. But landowners need management plan even if they're protecting land. There are state, federal laws for protected species. Find a reputable person to work with. Department Of Forestry (VA) doesn't do same things as Department of Forest Resources (NC)—The Department of Forestry (DOF) doesn't write management plans
Sometimes you may forget the most trivial questions, but if it's written down on paper, won't forget (i.e. What are the goals for your property?) Give them something to think about beyond just selling timber to pay for something

Layout good; style good;, basic info; In a couple of places I questioned how and what is said, but marked them for you on these copies; I have a knack for working with Limited Resource Landowners. They need something in their hands, but need some personal review, some personal contact. I often take a highlighter to highlight important passages for them. Very good basic info
Pretty good. Large enough with glasses to read. Personally I like pictures and you've got a lot of pictures.
Excellent. Straightforward. Readable. Very good.
[3 unasked]
“Tree Tips” Color: “Green is Good Choice With the Right Amount of Color
Green is for trees. Its not too much color
Good. Green, black, and white. Not too busy. Doesn't look like Xerox copy
Fine (3)
Color is always nice; it makes the article more appealing or eye catching. Be careful as not to get too much however. Cost becomes a factor as well with more color.
[1 unasked]
“Tree Tips” Font: “Good, But Don't Use Any Smaller Font”
There are different fonts. Consulting font is longer document . . .you need a larger font to fill up 4 pages . . . smaller font still visible
“Goods” a little small. Larger font better for older people. Large font makes look spread out, more basic info and easier to understand
Certainly wouldn't go smaller. Readable.
“Getting Help” is better, but you can't get everybody
The font is fine to me. Consider who your audience will be and their need for larger font. If it is too small some will simply set it aside and not read it.
Looks good (2)
“Tree Tips” Illustrations: “Help Explain the Concept Being Presented, But Some Are Faded”
Pictures look good. Nice layout
Very good. Helpful to have illus. for less technical. Faded picture of forester/family. Real good picture of corners.
Looks good to me. Captured essence of working with small landowners
Graphics are good. Not too much. Issues with faded deer
I think the illustration are good, they help explain the concept being presented. It is just enough to get the idea across to the reader.
Good. Pictures hold people's interest.
[1 unasked]
“Tree Tips” Reading Level: “Appropriate For Audience”
Good. Very basic. First thing I noticed. Good for general public, high school level. Non-technical explanations. This is a problem with lots of paperwork from this agency (too much technical jargon)

Okay. Doesn't answer all questions, but tells to get more help if interested. Need to include other options for reaching Cooperative Extension Service (CES) or Department of Forest Resources (DFR) if no computer. Central contact number?
I think the reading level is a little low for the target audience.
Very simple—the bullets are helpful
Of the three “Goods” is most basic
Its easy
Good.
“Tree Tips” Amount of Information: “2/3 Say Add More Resources”
Covered all the bases. Lots of good info. “Goods” seemed packed, but small font. Good that tells to go to professional. Good to tell how to find in phone book and website. Listed in NC State government (NCFS) listed in white pages (no blue pages) CES not listed in government section.
Give someplace to go if more questions—maybe add a central number at the university that refers landowners to other sources
I think its just enough, more informational sources could be added, such as publications on Tree Farming, etc.
[4 unasked]
Glossary As An Appendix: “4/7 Say It's a Good Idea”
For some might be good idea for people (agencies) who may not know. Just because you hear something doesn't mean you understand it
Take existing glossary and simplify and delete parts not pertinent to this audience [Discussed vocabulary (i.e. timber vs. trees) Sticking up there is a tree. Cut down, its timber]
Would probably help if this audience is working with consulting forester who's spitting out terms and acronyms-- cost share programs, alphabet soup
Good especially when with a consulting forester; if a landowner went for more advice, they'd need to know terminology
Not a bad idea or put some terms one on one of the publications. General definitions—can't think of a word right now that jumps out at me right now—but that's a good idea
Not too particular about glossary
I don't believe its necessary. Those persons with an interest will follow up.
Ranking “Tree Tips” Reading Level (1=Easiest): ““Goods” is easiest”
(Scored all publications as 2 out of 3—making the assumption that she ranked them equally easy) “Goods”—concise “Getting Help”—easy to read “Getting Started”—I like the boundary info; different things about each of them good
1 “Goods” 2 “Getting Started” 3 “Getting Help”
1 Good--outline format, two sentences for each topic 2 “Getting Help”—concentrated on one thing 3 “Getting Started”—covers heavy duty stuff All pretty easy to read and understand

1 “Goods”	2 “Getting Help”	3 “Getting Started” (contains tax info people have to think about)
Equally easy		
1 “Goods”	2 “Getting Help”	3 “Getting Started”
[I unasked]		
Ranking “Tree Tips” Importance (1=least important): “5/6 say “Getting Started” Most Important”		
1 “Goods”	2 “Getting Help”	3 “Getting Started” (3)
1 “Goods”	2 “Getting Started”	3 “Getting Help”
1 “Getting Help” (although very important) 2 “Goods” (lots of stuff people might not think about) 3 “Getting Started” (think people might get the most out of; questions common occurrence)		
1 “Getting Help”	2 “Goods”	3 “Getting Started”
[1 unasked]		
Additional Topics for “Tree Tips”: “Reforestation, Cost Share Assistance, and Adaptations for Virginia”		
Woodland Owner Notes, CES forestry bulletins and others related to wildlife and forestry are generally good, but may need to be simplified more for this audience. Pinestraw, hunting leases, things to avoid (being taken advantage of)		
Difference between states; check with Dept. of Ag what can and cannot be done, interstate commerce, what’s inspected, legalities		
After you cut, what do you do next? Some consulting foresters don’t even handle reforestation; Thinning; Pine maintenance		
Getting cost share assistance difficult. NRCS had federal forestry program but as a result of Farm Bill, out of it (no funds). We have cost share programs but not just timber based, but may be wildlife <u>and</u> timber based. USFS has FLEP but adds interest to conservation job (in terms of ranking applications), particularly good if landowner will not get immediate economic return. We try to get word out. Government works funny on having money available for you.		
If you get someone to log, what are the do’s and don’ts, i.e. going over boundary line to get timber; importance of relaying to logger to observe SMZ, cutting on wetland (shared observations of cut over land in extremely wet conditions)		
Replanting		
[1 unasked]		

Table 8: Goods From Your Woods”

“Goods” Viable Options And As Independent Publication: “Viability Is Site and Person Specific, Publications of Hunting Leases and Pinestraw Production”
“Goods” has the least value (when visualize audience). Last three topics listed not

<p>feasible. Uncommon for this audience to have sufficient resource (plants, etc) to realize income from it. Historically alternative is tomatoes (other veggies). Many in this audience don't look beyond already established means. Many may have these possibilities (on their land) but they need something on hand to help them be creative. Low literacy audience not creative, no people skills. May cut firewood, but to make wreath, sell at farmers market . . . intimidated by people. Stand alone publication—hunting leases. Could be very in depth—no justice on Tree Tips. This audience needs motivation to think creatively. Could do any of these topics as individual publications. If prioritize, the last 3 on first page will be low.</p>
<p>Don't imagine to many doing plants, foods. Time consuming. Depends on site. Not inclined to pick, dig up.</p> <p>Hunting leases as stand-alone would be good idea. Big deal. Seen lots of hunting club signs on way to coast. Got a couple of wildlife clients with hunting lodge on property. Lots of specifics to know b/f set up hunting leases</p>
<p>Some of these might not be the best option for one landowner but might be an option for someone down the road. Consulting forester not helpful with legal info for hunting leases. Landowners can do hunting leases on even 10 acres or less. Rate of hunting rights is often the rate of taxes for the land. Rent to one person or incorporate with other land being rented [contiguous areas]. Talk to someone with legal advice.</p> <p>Running cedar is a strange one. May be considered threatened. May want to delete. It is affected by environment (i.e. when thin can ruin running cedar)</p>
<p>Definitely hunting as viable option. Some do pinestraw, firewood, a few do the crafts. Big thing about plants: don't go into neighbor's property. Be careful for food items—poisonous plants</p> <p>Running cedar is protected.</p> <p>Pinestraw, hunting leases as individual pubs</p>
<p>Pinestraw → most operations are nets and tractors. Has to be longleaf</p> <p>Look under fed websites for protected plants; Wildlife Commission (publishes mag every year w/ listed species) “Wildlife in North Carolina</p> <p>Hunting leases in this county go for about \$10-\$30/ac. Stand alone publication for hunting leases—people from Raleigh and city want to get away, willing to pay</p>
<p>“Goods”—niche markets. Only so many sellers before you saturate the market. Food—if sell out of home must be inspected.</p> <p>Marketing—this audience no ability or savvy of web based sales</p> <p>Pinestraw not done in Brunswick very much. If mulch, mulch correctly—some plants don't need Pinestraw, some plants can't be mulched all the way up the tree—stops respiration</p>

Bird watching is unbelievably growing industry. Some may do if semi-noninvasive—may not want people shooting dove, but with pair of binoculars. Also look at what amenities can form—picnic areas, walking trails. Liability issues—check with insurance writers

Marketing can be done at convenience stores, etc, but convenience stores may have contracts with big companies

Check with Dept. of Ag to see if need inspections

These would be very site as well as person specific. Renting hunting rights may be good for some and not others. Location plays a great deal in some of the other alternatives. Publications such as this that will list places or persons to get help from are going to be beneficial.

Table 9: “Getting Help” and “Getting Started”

“Getting Help” Amount of information: “4 Say Good, Important Information”

Very appropriate. Basic info. New publication by Cooperative Extension Service about consulting forester [Timber Sales--refers to using a consulting forester, what services they provide]

Yes. Like end of p.3 that describes other types of foresters (and in WW last section on p. before checklist). The section in WW more detailed. Pull from these to include in “Getting Help”. Make smaller font to add more info.

Really like Consulting forester publication [TT and WW]

Check references for consulting forester

Like independent loggers, contractors info

Most people only sell timber once in lifetime. Better to get consulting forester to help who does it regularly

Department Of Forestry have consulting list, counties tailor down to their area. Consulting foresters do not have to go through formal certification, can apply to be put on forester list, but have to prove know what’s going on. Some have gone thru certification; some may work both states (Sharp Logger). In process of changing certification process. Included good information about talking to forester and asking questions

No free help from Department Of Forestry

Everything needs to be included in agreement (reseeding, roads, etc) need to be very explicit.

VA funds—EQUIP is about all that's available
That's even bigger print. Add another thing→ 20-30% more revenue if use consulting forester. Have a hard time trying to convince people to use consulting forester. Department of Forest Resources has updated list for consulting foresters. To avoid bad ones talk to adjoining landowners to see what they're doing. Talk to several. If see a timber sale sign up, ask that landowner what they're doing
Fine. Question about good forester looking out for what's good for you. A not so good forester won't. Small landowners are particularly susceptible to shady people. Limited resource land can become so encumbered because so many heirs. Guys see timber, find heirs, get them to sign off on the timber. "I'll pay you \$100 for your part (much less than its worth)". Regular consultant may say no (to work with this audience) because land so entangled with heirs.
[3 unasked]
“Getting Started” Reading Level: “3 Say Good Elementary Level”
Good elementary level. I write a weekly column for paper. I write at 5 th grade reading level. I have to reread the material to see if understandable by 5 th grader
Not too easy. Good basic info they need. Simple and easy to follow. Don't make it any harder, then it would have technical terms nobody knows
Fine. Having dealt with many landowners over the years, the more basic it is, the better off you are. For example [direct question from publication] “What do you have?”—some people don't even know what they have. I take a lot of stock in Department of Forest Resources (DFR). DFR is paid by state taxes. They have nothing to gain (in taking advantage of landowner).
[4 unasked]
“Getting Started” Tax Assessor and Register of Deeds information: “Correct Information”
Deed tells same thing as assessor. You can determine current owner and previous owners thru register of deeds
Tax assessor info works in county. This county has tax CD. Can pull up on computer. Parcels not broken up in forested/ag. Knowing tax PIN is helpful. DFR can pull it up and know where it is so a landowner doesn't have to take the day off to meet with DFR. A Connecticut man called and had his PIN. DFR pulled up his land, visited the site, and wrote up management plan—All w/o having to met with client.
Our number is tough to find in phone book. Have to know what town the office is in. Add district phone number for each county. 733-2162 for DFR district map to include in publications
Don't know if works for county (lives in another county), doesn't deal with county stuff
Yes. Exactly right. They may charge for maps. Don't; know about legal stuff, but I guess that's what I would do.
Pretty good system. IF ARC view can pull up landowners, size of land, etc
Good boundary info. Include directions on how to mark—if out in bark, flakes of; too deep into cambium layer, damage to tree

Tax assessor info works for VA, plat maps at clerk's office
Legal advice—seed tree law→ leave tree to reseed or of clearcut and put in pasture, let DOF know
Yes this information is very good and works in Virginia. I would like to add, “Know and/or find out as much as possible about your property and especially its potential. Consider the location of the property to potential development and/or growth”.

Table 10: *Woods Wise*

“Woods Wise” Color: “3 Don’t Like the Brown”
The green is better than brown, but any color to make it stand out
I like the green. Same amt of color as the others
Not a brown fan. Green a little brighter. Woods people might like brown. Doesn’t have highlight effect b/c blends w/ black font
Fine (3)
I would like to see more color in the illustrations
“Woods Wise” Font: “5 Say Its Easily Read”
Good
Good, easy to read. I think anybody can read that
Nice big font. More space to write notes on pages as if someone were giving you info
I like ‘em. I can read ‘em.
The font is fine, I think.
[2 unasked]
“Woods Wise” Illustrations: “3/4 Can Tell What Is Being Depicted, But Add Captions”
Very good
Need captions for thinning pictures for those not familiar, or for any pictures depicting concepts. I like the dead space for notes—especially under “How to Find A Consulting Forester”
Fine. Looks good to me. Depictions—yeah I think I can tell (what each picture is)
Yes I can and believe the audience can as well
[3 unasked]
“Woods Wise” Reading Level: “Appropriate, But One Says Its Too Low”
When I read them it didn’t dawn on me that they were different literacy levels. Both elementary. WW just more info (not more difficult to read)
What do you mean about reading level? Yeah I think that’s okay
A little higher than other but for audience its appropriate. More info (than Tree Tips), but no super terminology. If add anything, more info to get lost in

Fine (2)
Again, I think the level is a little low.
Style good, basic info
“Woods Wise” Explanation of Forestry Information: “Good General Overview”
Lots more detail than included in “Tree Tips”. I never questioned the accuracy
Good stuff. Concrete. Maybe Woods Wise could give readers an idea of the age range for thinning 15-20 years (commercial thin), then another 5 years clearcut. Offer some type of guide. Most of people are planting back pines b/c fastest rotation. Planting hardwood is expensive. Some sites good option for hardwood. {Age 3-6 or 5-6 for pre-commercial}
Good general overview. Don’t go any further or make it less. I’m not a forestry person, but I understood.
Don’t know much about forestry, but felt I had gained some knowledge
The print is bigger, but the words are simpler on “Tree Tips”. May want to put out stuff for loggers→ safety (even for landowners in general—if crew hesitant to go into area, landowner shouldn’t)
I think this is enough information to get a person in the right direction. I think its good—short and to the point.
Doesn’t give a lot of detail but tells where to look next
Agency Representation: “Agencies Not Located Together, NRCS Only Has Some Forestry Assistance”
Cooperative Extension may not be located in USDA County Center. The trend now is to build them all together, but some counties are not (referenced in Woods Wise). Check local phone books for dispute of blanket statement (may be listed separately under county)
Good. Logo used twice (in WW). Maybe everything should be red [reference so that part of CES logo red ?]
We’ve pretty much eliminated all forestry programs to USFS and Farm Service agency. FSA does no technical—does money side of CRP/CREP
Lot of EQUIP wildlife based, not for people w. timber production
I refer all forestry issues to DFR. Forestry is not our main job. Have general knowledge of pine stands. If see something might point it out [while on site visit]
Yes. NRCS offers forestry cost share assistance through the Environmental Quality Incentive Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP)
[5 unasked]

Table 11: Contact Information Poster

Comfort In Using Contact Information Poster: “Good Resource But Adapt for Virginia”
Lot of the same departments as NC but different acronyms. DCR-Dept. Conservation and Recreation (?)→ Department of Environment and Natural Resources (DENR); American Farmland Trust—add under federal; Nature Conservancy has quite a few easements in VA; National Wildlife Conservation—add; still have SCS (soil conservation service); add insurance agency, i.e. Farm Bureau, State Farm for worker safety, hunting leases—look for specific group to insure these topics; for leases add consulting with lawyer, notary; Wildlife Federation, Wildlife Resource Commission, Audubon Society (for birdwatching); check out other private groups for volunteers to help with amenities (building, painting public bathrooms, etc)
Too busy. Too much on it. Too much to see for frame unless you get your nose up to it. Why couldn't you make a bulletin out of it? Something that folds up and is compact or no more than 8 1/2" X 11", probably cheaper to print.
Initial reaction is “whoa”, but when look at each category its better. I don't see anyway you could do it another way
Cool. I like charts like this. All agencies not located in service centers. Cool. Seems pretty useful. So if someone calls, I know who to refer them to. Write in contacts at bottom or boxes at top. Put in wall in front office. Lots of people come in, not to see us, but for this type of info.
Feel fine using it knowing that it's not everything. This is like the top 6 places to go. This is a lot of information. You can only do so much. Agency funny pollution. “Agricultural . . . call it something else . . . sedimentation, runoff”. That's good. Sediment could almost be a separate category and take out_____. There should be an S in Natural Resource Conservation Service. Could put first two rows together b/c about the same and then add water quality.
I like flow charts. For tax options CES might not be better choice than others listed
[1 unasked]
Contact Information Poster Color Scheme: “Essential To Maintaining Visual Understanding Of The Chart”
I don't care what color it is. Looks good. Easily seen. Might not be able to do that on a bulletin, but if separate topics by page, wouldn't have to do it.
Good color-coding. Otherwise its overwhelming w/ all info on there
Looks fine –color blind (2)
Okay
Confusing without it
[1 unasked]
Contact Information Poster Corresponding Numbers on Boxes: “Understandable But More Helpful If Number In Box Refers To Color At Bottom, Error With Probate Court”
I could figure them out (2)
Pretty simple flow chart. Our organizational charts already look like this

Would be helpful if number in box refers to color at bottom. Either color in side box or just around number. Someway to correspond to bottom colors
Tax assessor listed twice? On purpose? 1— probate, 2—tax assessor.
I understand it. Probate court doesn't match up
[2 unasked]
Contact Information Poster Available Online: “Good Resource, But Not For Target Audience”
Great for me. Would be god idea to link to extension home page. Maybe not for audience. Very few people. May not use.
Good idea. Key to website to get to all at agency personnel. Sometimes takes a while for things to trickle down from top. Stumble upon websites and trickle down.
Yeah, it's a lot of work though. Would you be able to reach the people you want to reach? Do they go online? This is our same issue. I don't know if there's any way to get it right. Contact thru tax records
[4 unasked]
Additional Topics Or Agencies For Contact Information Poster: “Add Contact Information”
Hadn't thought about it. Looks comprehensive. 42 agencies already included
Add contact info in another strip at bottom w/agency and central contact number. For consulting foresters call DFR or CES. Could add air quality→ burn issues, prescribed burn. People call and ask if they can burn down their old barns and houses. These aren't our issues.
We also have Farm and Ranchland Protection Program up and running. Probably around Raleigh with lots of development around there. Cropland or forestland? It looks god. Probably more apt to put CES under education b/c not federal agency More people know where CES than USDA
Two different fonts, Change to one
Not that I would know of. Everybody that we deal with and some that we only deal with on occasion are here.
I'd want some place for numbers or websites, like for the private agencies, SARE grants. Maybe put numbers underneath name in boxes or write in rows @ bottom, provide stuff on back, or sidebar (in border)
Looks like you got 'em all
[1 unasked]

Table 12: Distribution and Additional Comments

Distribution of Publications: “Tax Offices, Register of Deeds, Libraries, Forestry Associations, Etc.”
Nature Conservancy, tax assessors office, register of deeds, etc
If I knew how to distribute, I wouldn't have trouble getting ours out. This audience

won't get on our mailing lists and we can't lure them into the building for meetings
Local library
Would like to have some in NRCS office. Send 5 per office or 100 to area office. Ind. Offices will request. Make sure website sent to print offline.
Don't do mass mailing (to landowners ?) Make blurb at annual, monthly forestry meeting in each county. Not distribute as they come in or out of door—they won't read it. Cover some of it while in meeting; or at CES—picked up intentionally
Forestry association in count. Anyone w/ forested land can join, actually anyone. Run by local landowners w/ advice from FS. Tour in December. Meeting in Feb.—meal, speaker talks about tax incentives, etc. Pres. Eugene Brown. Consulting foresters, tree planters, etc. attend mtgs. Good tool, see what everybody's doing. The toughest issue with small landowners with many people involved is finding who's making the decisions, who has the authority to make decisions. Jimmy Watson (from Littleton) is an established consulting forester—lots of people know about him. If it's difficult to find local people that know a forester, this should be a red flag.
FSA, SCS
I think these are appropriate
Other comments: "Reaching the Target audience, Consulting Foresters"
We struggle with trying to make materials more pertinent to audience we're trying to reach. Stay focused on real issues/needs and objectives
Bird watching as option. Trails, benches, picnic, and elevated areas: many not accustomed to dealing with public. But how do you make bird watching groups know you exist? May take money
One of the biggest things landowners may not know about is reforestation cost share from DFR. FDP program is pretty constant
Another CRP sign up coming up in next couple of months (maybe Sept.). Huge last sign up.
Good and bad results with consulting foresters. Good results with industry consulting foresters—more inclined to work with large landowners. Asking for references gets around the bad guys. So does asking for references
Consulting foresters: I can't recommend consulting foresters. Good section on when to call or meet forester. If you're going to suggest consulting foresters, put out list of criteria to abate angry consulting foresters (the bad ones who will complain about not being on list) Take out broken words by SMZ picture
Diff. states have diff specifications for citing boundaries, i.e. 2" letters on signs. What's the law for VA, NC—share lots of info with VA
There's a typo on the back page of "Goods"— ". . . sometimes you can a conservation easement."
Landowners need to monitor what's going on, but be safe about it. A lot of folks don't think about it. We assume they know how to crank a chainsaw and the owner's manual

may not be written at a level that they can read.
Put VA contact info or disclaimer or reprint
[1 no comment]
Strategies to Get Target Audience To Read: “Workshop Modules, Reader-Friendly”
VA has modules thru Sustainable Forestry program; offer in 4 week classes; small fee to cover materials, refreshments; includes notebook, pre/posttest, incentives, certificates, continuing education units (CEUs) for consulting foresters, Sharp Loggers; melting pot of different interest → group dynamics
You’ve already made a piece that’s user-friendly. If you get it into their hands and its something they can relate to, they’ll read it.
[5 unasked]

Appendix F: *Tree Tips* and *Woods Wise* Publications



WOODS WISE

Guide to Consulting Foresters

ONCE YOU READ THIS GUIDE, YOU WILL KNOW:

- What a consulting forester is,
- What a consulting forester does,
- How to find and choose a consulting forester, and
- How a consulting forester is different from other types of foresters.



Here are just a few examples of how a consulting forester could help you:

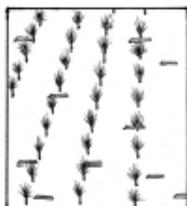
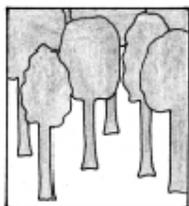
- Write a plan to make your woodland more valuable and enjoyable.
- Make arrangements for selling your timber and planting new trees.
- Give advice about prescribed burning and thinning, or almost anything else you want to do with your woods.

What is a consulting forester?

Consulting foresters help landowners plan and manage their woods. They are *consultants*, so you have to pay them. They are *foresters*, so they know how to take care of trees and the rest of the forest – like the soil, streams, and wildlife. In North Carolina, they are registered with the state.

What will a consulting forester do for you?

1. **Develop a management plan.** Many management plans involve growing, selling, and replanting trees. But you should have a management plan even if you don't want to cut many trees. For example, you could have a plan to lease hunting rights or sell pine straw. Or you may want a management plan just to make your woods



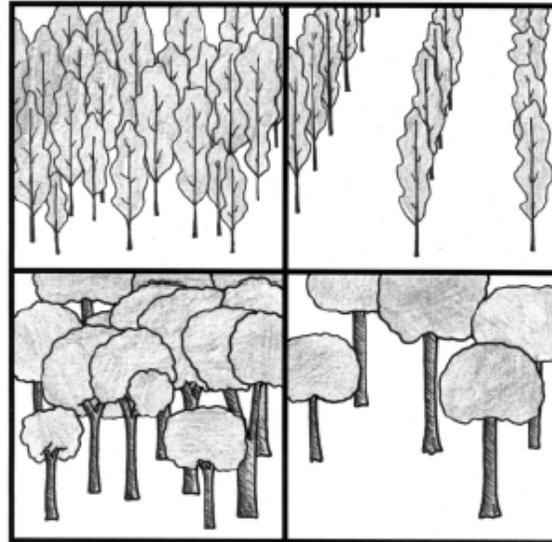
a place where you can relax and feel peaceful. Once you decide what you want to do with your land and trees, you are ready to write a management plan. Consulting foresters can write management plans with and for you. Such plans usually

describe goals for your land and trees and the steps you need to take to reach these goals. They describe how the forest looks now, the types of trees in the forest, how they are growing, and the size, volume (amount), and quality of your timber. The plan may also include information on the other plants and animals in your woods.

2. **Help you sell timber.** Consulting foresters can advise you on when to sell your timber. They can also "appraise" your timber, which means they calculate how much it is worth. For this appraisal, the forester walks through your forest, studies your land, and looks at the trees - their height, their width (diameter), what kind (species), and how many are there. Before a timber sale, the forester should mark areas to be protected, like "stream side management zones." The forester may also mark the best trees to cut. Consulting foresters can help you find timber buyers, get the best price, and prepare the timber sale contract. They also can advise you about financial assistance for replanting trees after the sale.



3. **Show you how to grow better trees.** Sometimes it helps to invest in timber stand improvements, such as "thinning" to get rid of poor quality trees and give the remaining trees more room to grow. These activities will improve the health, growth, and quality of the remaining trees. A consulting forester can tell you which activities make sense on your land and when they should be done.



4. **Help you decide about controlled burning.** There are several reasons you might burn your woodland. One is to get rid of unwanted competing trees or shrubs, as a "timber stand improvement." Another is to prevent the build up of dead trees and leaves that might result in a major fire. Some landowners burn their woodland to benefit wildlife. Consulting foresters can mark the area to be burned, make sure that it is surrounded by good "fire lanes" (clear spaces that prevent the fire from spreading), and actually conduct the burn.



5. **Mark your boundaries.** You may not be able to see the boundary between your land and your neighbor's land. Consulting foresters can help you review your boundaries or find a surveyor to check the boundaries. Knowing your exact boundaries is important if you sell timber, lease land for hunting, or conduct "controlled burning." It is also useful if your neighbor is planning to sell trees.

How do you find a consulting forester?

The North Carolina Division of Forest Resources keeps a list of consulting foresters. They have an office in every county. You can find the phone number under "forestry" in the North Carolina state government pages in your local phone book. The county ranger or other Division of Forest Resources staff has a list of consulting foresters in your area and can help you choose a consultant. The Cooperative Extension Center in your county might also have a list of consulting foresters and can discuss your forestry needs. You can also find a list of consulting foresters on the Division of Forest Resources web page: http://www.dfr.state.nc.us/tending/tending_consulting.html.

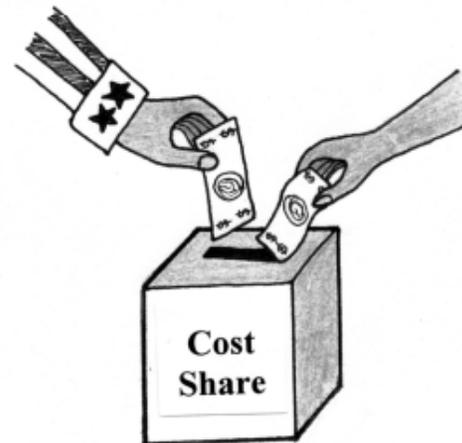


How do you choose a consulting forester?

Foresters have different skills and experience. Some might specialize in work with small landowners, and others work mostly with big landowners. Some might specialize in "timber stand improvements" and some in managing for wildlife. Most consulting foresters can help you plan for anything that you want to do with your woods. You should talk to several consulting foresters before choosing one. Tell them how many acres you have, and what you would like to do with your woods. You also want to make sure that you can get along with the forester. Most consulting foresters will visit your land and meet with you the first time for free.

When you call or meet a consulting forester for the first time:

1. Check that the consultant is registered with the state. The State Board of Registered Foresters makes sure that its foresters have basic forestry skills and follow rules for good consultants. Consulting foresters who are registered with the state must work only for landowners, and not for forestry companies or some other business interest. Consulting foresters may also be members of the Association of Consulting Foresters or the Forest Stewards Guild.
2. Tell the consultant what you want to do with your woods – or what kind of advice you need. Then ask if they have helped other landowners do similar things. You might ask for names of other landowners who can tell you about the consultant's work. Call them and ask if they were happy with the consultant!
3. Ask the consultant if he or she knows about taxes and about government programs that will help you pay for improvements on your land. Ask them which cost share programs they would recommend for you.
4. Ask the consultant about his or her fees. Depending on the services you need, a consulting forester may charge a flat fee, may charge by the hour, or may take a percentage of the timber or the revenue made from a timber sale.
5. Finally, compare their answers. Then pick the consulting forester who you think will do the best job for you! Once you choose a consulting forester, you should sign a written contract. It should clearly state what the consulting forester will do, when it will be done, and how he or she will be paid.



Who else can provide advice about my forest?

Each county has a forest ranger from the NC Division of Forest Resources. They can help you write management plans, or they can help you find a consulting forester. Their services do not cost anything. This is a good place to start looking for advice.

You can also seek advice from your county Extension agent, and from the county representative of the Natural Resources Conservation Service. You can find these and other agency representatives at the USDA County Service Center.



What if a "procurement forester" contacts you?

These foresters work for forest industry. They buy timber for a single company, or for several companies. Sometimes they give advice about replanting trees, but they work for a company. They may not look out for your best interest.

What if independent loggers or contractors visit you?

These people buy timber. Some are well trained and interested in the health of your forest. Others are more interested in getting the most profit instead of helping you maintain a healthy forest.

If you decide to sell your timber, you will probably make more income by hiring a consulting forester to help you with the sale. The consultant will help you contact several different loggers to find who will pay the best price for your timber.

Be Woods Wise! *Check off these steps:*

- ✓ Get the names of several consulting foresters from your local county forest ranger or local Extension agent.
- ✓ Think about your goals for your land.
- ✓ Talk to more than one consulting forester about how they can help you reach your goals.
- ✓ Choose a consulting forester and check if he or she is registered with the state.
- ✓ Sign a written agreement with your consulting forester.



Prepared by Rick Hamilton, Kelly Mance, Erin Sills,
Sarah Warren, Robert Bardon, and Susan Moore.
Selected Illustrations contributed by Liessa Bowen.

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TREE TIPS

GETTING STARTED WITH YOUR WOODS

Have you just purchased or inherited land? If your land includes lots of trees, here are some important things to know.

Get help from an expert

You can ask for help from:

- North Carolina Cooperative Extension Service (free)
- North Carolina Division of Forest Resources (free)

You can find their phone numbers by looking in the North Carolina state government pages in your local phone book. You can also hire a consulting forester. Although consulting foresters charge for their services, their help is worth the price!



Take a walk in the woods

It is important to be familiar with your land before you ask for expert help. Walk through your woods. Talk with your new neighbors. Here are questions to help you learn about your land:

- Is your land hilly or flat?
- Are the trees big or small?
- Do most of the trees have needles (pines) or leaves (hardwoods)?
- Are the trees in rows or naturally scattered?
- Are there streams, lakes, ponds, wetlands, or other water?
- Do you see signs of animals living in your woods?
- What other useful things do you see in the woods: is there pine straw, a good picnic spot or campsite, berries and nuts, or walking trails?
- Are there roads near your woods? Or a road through your woods?
- What was your land used for before?

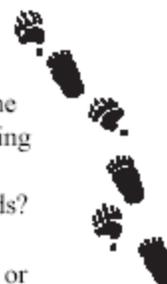
Ask your neighbors if they remember timber harvests, hunting, or other activities on your land.



pine



hardwood



signs of animals



witness tree

Know your boundaries

Do you know where your land ends and someone else's land begins? The corners of your land may be marked by:

- Trees with three slashes (called witness trees)
- Some type of metal stake or pipe
- Piles of rocks, or piles of rocks with a stake

Check if your neighbors recently had a "survey" and will show you the map of their land.

Make sure that people know to ask your permission before using your woods. "Post" your property by putting up "no hunting" or "no trespassing" signs every 100 - 150 yards along the boundaries.



metal stake or pipe



pile of rocks



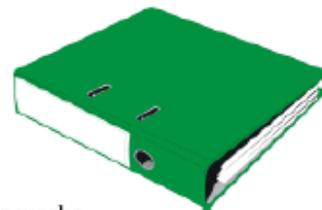
pile of rocks with stake

Keep records of everything

Good records will help you make choices about your land and could help you reduce your taxes one day. Keep all of your papers together in a notebook or file.

What papers should you keep?

- Receipts, bills, and letters (Write down what you bought or sold, how much of it, and who you bought it from or sold it to.)
- Maps
- Copies of checks or money orders (These are easier to keep track of than cash.)
- Photos of your woods
- All other important papers, like management plans and agreements.



Sign a written agreement with anyone who uses your land or works on your land. Be sure to pay your property tax bill!

Get information

You can learn about your land from county records. Get a copy of the deed and a copy of the map for your property. There are two county offices where you can find this information:

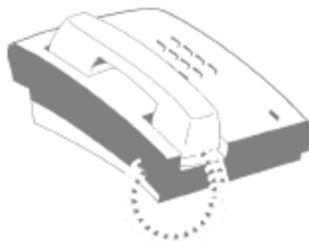
- **Tax Assessor.** Here you can find:
 - Size of your land (number of acres)
 - The listed owner (this person receives the tax bill)
 - Buildings and other “improvements” (houses, barns, etc.)
 - The value of the land (used to calculate your tax bill)
 - Maps of the property

- **Register of Deeds.** Here you can find:
 - The deed and a description of the land, its boundaries and corners, and sometimes a map
 - Any lien or mortgage put on the land because of taxes, loans, or legal problems.



Get legal advice

A lawyer or other professional can be very helpful to a landowner. They can look up all of the information in the county offices for you. A lawyer or accountant can give you advice about taxes. Most lawyers charge fees, but their help may be worth the price. Here are several ways to find a lawyer:



- Call the lawyer referral service of the North Carolina State Bar Association or Legal Aid of North Carolina to ask for the name of a lawyer. (Phone numbers for these organizations are listed in the phone book.)
- Ask friends and neighbors if they can recommend a lawyer.
- Look through the yellow pages in the phone book under “Attorneys.”



Prepared by Kelly Mance

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Do you have a lot of trees on your land?
 Do you need help taking care of those trees?
 Would you like to make money from your trees?
 If so, a forester can help.

A consulting forester:

- Helps you manage your land and trees
- Is listed with the state as a registered forester
- Has forestry skills and experience
- Knows about forestry regulations
- Looks out for what is good for you and your forest



How do you choose a consulting forester?

All registered consulting foresters have basic forestry skills. Some foresters have specialties like managing for wildlife or pine straw. Before you hire a forester, you should:

- Talk to a few foresters, and ask them about their specialties.
- Ask what they will do and how much it will cost for their help.
- Check if they are registered with the state by asking the Division of Forest Resources.
- Ask about their experience and check with a few references.

You can find phone numbers for the local offices of these agencies by looking in the North Carolina state government pages in your local phone book. *(Or look on the internet at http://www.dfr.state.nc.us/tending/tending_consulting.htm)*



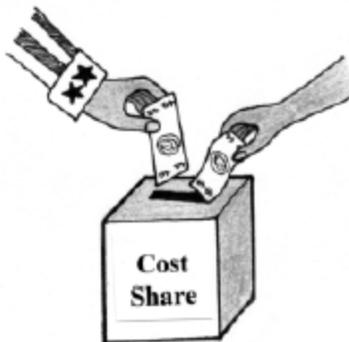
How do you find a consulting forester?

Get a list of consulting foresters from:

- North Carolina Division of Forest Resources
- North Carolina Cooperative Extension Service

What can a consulting forester do?

- Help you write a plan based on what you want to do with your woods. The plan will tell you when you need to take each step.
- Help you improve your woodland so you can make money in the future if you decide to sell the trees.
- Help you find people to buy your trees and get the best price for them.
- Help you plant new trees so that you can make more money later.
- Give you advice about how to attract more deer, quail, or turkeys to your woodland.
- Help you find people who will pay a fee for hunting in your woods.



A forester will tell you about government cost share programs.



Before you sell your timber, a forester should mark trees to protect streams.

How much does a consulting forester cost?

Consulting foresters charge for the help that they give you. If you are selling timber, they often charge a share of the profit from that sale. If you are planning how to manage your land, they might charge a flat fee. But foresters can help you make a profit even though it costs for their help. The advice they give you will be worth the price.

Do I need a written agreement?

Make sure you have a written agreement with your consulting forester. The written agreement should say:

- What jobs will be done.
- Who will do the jobs.
- How much the forester will be paid.
- Who will pay the forester.



Are there other types of foresters who don't charge for their help?

Yes! Your County Forest Ranger at the Division of Forest Resources offers free advice and helps write management plans. You can find your county forester listed in the phone book in the North Carolina State government section.

Be careful! Many other people buy timber, but they are usually working for a company not for you. They are not registered consulting foresters. You will always get the best advice from a registered consulting forester, because he or she is looking out for what is right for you and your woods.



Prepared by Kelly Mance, Erin Sills,
Sarah Warren, and Rick Hamilton.
Selected illustrations contributed by Liessa Bowen.

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TREE TIPS

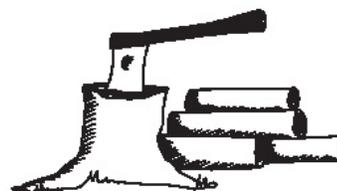
GOODS FROM YOUR WOODS

Do you have a lot of trees on your land?
Would you like to make money from your
woods without selling all your trees?

You can sell “goods from your woods,” such as firewood, plants, and holiday greenery. You can even sell hunting rights. Or you can save money by giving “goods from your woods” as presents or using them at home.

Firewood:

After logging, there may be wood left on the ground that can be cut for firewood. Crooked trees also make great firewood. Save some trees with nests and hollows for wildlife. *Know how to safely use chainsaws and protect your eyes and hearing.*



Pine straw:

Gardeners and landscapers buy pine straw that is clean (no cones or other leaves). Longleaf pine needles are best, but some people also rake other types of pine needles. Rake and bundle the pine straw yourself, or rent your land to someone else for raking.

Craft materials and decorations:

Grapevine is used for baskets and wreaths. Pine garlands, pinecones, holly berries and leaves, running cedar and mistletoe are used for holiday decorations. You can sell many things for crafts, such as dried flowers or seedpods.



Plants:

Plants from your woods can be used in gardens and yards. You can dig up and sell bamboo, ferns, small dogwood or oak trees, and flowering shrubs. Be careful to keep the plants alive and healthy. *Ask your Cooperative Extension agent about plants that are protected and regulated by law.*

Food:

Pick and preserve berries, fruits, and nuts to sell, eat, or give as presents. *Learn which plants can be eaten, and how to store and process them so that they are safe to eat.*



Charge for hunting on your land:

Hunters may be willing to pay you to hunt in your woods, especially if you have lots of game animals. You should hire a lawyer or consulting forester to write a contract with the hunters to make sure that they follow safety rules, state law, and any rules that you have about when, where, and what they can hunt. You decide who can hunt, and when. *Ask your lawyer or consulting forester about insurance requirements.*



Protect or improve your woods and get paid for it:

Protection of woodlands is important! Sometimes you can get cost share payments from the state or federal government to help pay for environmental improvements, like increasing wildlife habitat in your woods. Sometimes you can a “conservation easement” that will give you a tax break if you agree not to develop your land. *Ask a Cooperative Extension agent about the rules of the different programs.*

Where can you sell your “goods from your woods”?

- Fruit and craft stands
- Farmers’ markets
- Convenience stores
- Flea markets
- Local nurseries
- Landscaping companies



Remember to ask for help as you make plans. Your agricultural agent at the local Cooperative Extension Center or county forester at the Division of Forest Resource can help—look up their numbers in the North Carolina state government pages of your phonebook. You will also need to hire a lawyer or a consulting forester to write a contract if you are going to let others cut firewood, rake pine straw, or hunt on your land.



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Selected Illustrations contributed by Liessa Bowen.

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