Sustaining Family Forests Initiative

Getting the Attention of Family Forest Owners

*Lessons from Social Marketing Research*

Summary of *A Priori* Segmentation and Prime Prospect Analysis

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Introduction

This is a summary of the report, *Family Forest Owners: An In-depth Profile,*[^1] prepared by Roper Public Affairs and Media, a division of GfK Custom Research, for the Sustaining Family Forests Initiative. It is an early result of an ongoing effort to better understand the demography, attitudes, behaviors, and intentions of American family forest owners. Social marketing—the use of commercial marketing techniques to effect positive social change—is a promising means by which to influence family forest owners to practice stewardship of their land.

We analyzed data from the USDA Forest Service’s National Woodland Owner Survey to better understand family forest owners and, in turn, how a successful social marketing campaign might be implemented. In addition to simple cross-tabulation analyses and profiling, we performed two multivariate segmentations of family forest owners. The first is a hierarchical, multivariate analysis based on landowners’ attitudes that reveals four groups of owners: supplemental income, working the land, woodland retreat, and ready to sell. The second is a “prime prospect” analysis that segments landowners according to their level of engagement and interest in land management.

Landowners showing low levels of engagement but high levels of interest—the prime prospects—are of special interest because they are likely to be receptive to a social marketing message, and should therefore be a priority target for any such efforts. In addition, landowners showing high levels of engagement but low levels of interest—the potential defectors—should also be targeted. Using the demographic profile of the average family forest owner—a white male, age 55 or older—newspapers and television were identified as important means for mass communication.

In the next phase of the research, we will refine our understanding of these landowners by conducting focus groups, and develop ideas for communication channels and messages on forest stewardship that are well-grounded in research and that would resonate with various segments of the landowner population. This social marketing research can be used to develop more efficient and effective outreach, policies, programs, and services for family forest owners.

Background and Objectives

The Sustaining Family Forests Initiative is a collaboration of government, industry, NGOs, certification systems, landowners, and academics organized to gain comprehensive knowledge about family forest owners in the United States—credible, useful information for those who wish to create a climate in which forest owners can easily find the information and services they desire to help them conserve and manage their land.

[^1]: The full report is available as a PDF download on www.sustainingfamilyforests.org or by contacting Mary Tyrrell, mary.tyrrell@yale.edu.
The conservation and sustainable forestry challenge on family forests is multi-sectoral and national. No organization or agency has the resources, knowledge or credentials to meet this challenge alone. This private land is perhaps the last frontier to extending sustainability concepts to all of the nation's forests. And it is the forest most at risk of being fragmented and converted for development. Decisions made by large numbers of small private landowners collectively enhance or degrade the landscape. How they manage their forests and whether or not they convert them to other uses is of significant public interest. However, current evidence and opinion is that most individual landowners are not reached with credible, useful, and compelling information and services. Although there exists sample census information about their forests and demographics, there is no comprehensive information about their personal attributes, how they value and relate to their forests, how they make decisions, what sources and kinds of information they value, or the contemporary services they need.

To begin this research, we worked with the National Woodland Owners Survey database, linking this tremendous resource on forest owners with demographic and behavior information. We envision that an ultimate result will be a new social marketing dimension added to the National Woodland Owners Survey that will provide more comprehensive and useful information to the various constituencies that are interested in servicing private forest owners. The immediate objective is to:

- Serve as a wide-ranging information resource for the initiative’s various constituents (i.e., government agencies, industry, consulting foresters, landowner associations, land trusts, conservation and biodiversity NGOs, sustainable forestry certifiers, universities, and foresters,) and
- Provide direction for enhanced outreach to these landowners and aid a broad spectrum of organizations to be more strategic in meeting education and service goals with limited resources.

The collaboration stems from a stakeholder panel that met at the Johnson Foundation's Wingspread Conference Center in Racine, Wisconsin on October 6-8, 2003. That panel, representing broad forestry and forest conservation interests, concluded there is woefully inadequate knowledge about family forest owners in the US and that a social research approach would be a useful means to gather necessary information about these diverse landowners.

The initiative is being led by a management team, with the support of an *ad hoc* advisory committee of diverse stakeholders. The Yale Program on Private Forests and the American Forest Foundation administer it collaboratively.

**Management Team**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Bill Banzhaf</td>
<td>Sustainable Forestry Board</td>
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<td>Brett Butler</td>
<td>USDA Forest Service</td>
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<td>Bob Fledderman</td>
<td>MeadWestvaco Corporation</td>
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<tr>
<td>Mary Tyrrell, Project Coordinator</td>
<td>Yale Program on Private Forests</td>
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<tr>
<td>Scott Wallinger (2002-2006)</td>
<td>Retired, MeadWestvaco Corporation</td>
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<tr>
<td>Larry Wiseman</td>
<td>American Forest Foundation</td>
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Support and Funding

The Sustaining Family Forests Initiative has benefited from a broad constituency of advisors representing government, industry, and the conservation community. The Yale Program on Private Forests and the American Forest Foundation provide administrative support. Generous financial support was provided by:

American Forest & Paper Association
International Paper Company
Lowes, Inc.
MeadWestvaco Company
Potlatch Corporation
Surdna Foundation
The Nature Conservancy
USDA Forest Service Cooperative Forestry
USDA Forest Service Northern Research Station
USDA Natural Resources Conservation Service
Weyerhaeuser Company Foundation

Advisory Committee (as of July 2006)

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Don Arnosti Community Forestry Resource Center of IATP
Ted Beauvais USDA Forest Service
Chris Bernabo National Commission on Science for Sustainable Forestry
Connie Best Pacific Forest Trust
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Steve Broderick University of Connecticut/Forestry Extension
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Bob Emory Weyerhaeuser Company
Jessica Eskow International Paper Company
Geoff Feinberg GfK America, Roper Public Affairs & Media
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<td>Donald Ferguson</td>
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<tr>
<td>Kathryn Fernholz</td>
<td>Dovetail Partners, Inc.</td>
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<td>Warren C. Gaskill</td>
<td>Rapid Improvement Associates, LLC</td>
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<td>Kent Gilges</td>
<td>The Nature Conservancy</td>
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<td>Michael Goergen</td>
<td>Society of American Forester</td>
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<td>Scott Jones</td>
<td>Forest Landowners Association</td>
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<td>David Kittredge</td>
<td>University of Massachusetts/Extension Forester</td>
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<tr>
<td>Keville Larson</td>
<td>Larson &amp; McGowin</td>
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<td>Sara Leiman</td>
<td>Oregon Small Woodland Owners Association</td>
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<td>Richard Lewis</td>
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<td>Catherine Mater</td>
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<td>Marvin Meier</td>
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<td>Eric Norland</td>
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<td>Beth Richardson</td>
<td>Clemson University Extension Service</td>
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<td>Eli Sagor</td>
<td>University of Minnesota Extension Service</td>
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<td>V. Alaric Sample</td>
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<tr>
<td>Neil Sampson</td>
<td>The Sampson Group, Inc.</td>
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<td>Lynn L. Schumann</td>
<td>Land Trust Alliance</td>
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<td>Mark Shaffer</td>
<td>Doris Duke Charitable Foundation</td>
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<tr>
<td>Mary Chapman Snieckus</td>
<td>Pinchot Institute for Conservation</td>
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<tr>
<td>Frank Taylor</td>
<td>Forest Owner, Mississippi</td>
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<tr>
<td>Tom Thomson</td>
<td>Thomson Family Tree Farm, NH</td>
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<td>Kirk Titus</td>
<td>Weyerhaeuser Corporation</td>
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<tr>
<td>Doug Williams</td>
<td>Natural Resources Conservation Service</td>
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<tr>
<td>Amelia Wright</td>
<td>Tree Farmer, Maryland and Delaware</td>
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<tr>
<td>Dale Zaug</td>
<td>Wisconsin Woodland Owners Association</td>
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</tbody>
</table>
Research Targets

In this report, family forest owners are defined as individuals, married couples, family estates and trusts, and other groups of unincorporated individuals who own 10-999 acres of forestland in the continental United States. Unless explicitly stated otherwise, all data in this report are for this population. The data are culled exclusively from the USDA Forest Service’s National Woodland Owners Surveys (NWOS) from 2002, 2003, and 2004. Brett Butler, who heads up the NWOS, has been an integral part of the study team, working with Roper on use of the data as well as directing the project as a member of the Management Team.

The research consists of two components. The first is an a priori segmentation analysis, intended to create an information resource for the initiative’s various constituents and provide strategic direction for enhanced outreach to these landowners. The second is a prime prospect analysis, which looks at the landowner base through the lens of a social marketing campaign. This analysis provides an innovative way to understand family forest owners and how to effectively communicate with them about land stewardship.

A Priori Segmentation Analysis

The purpose of the a priori segmentation is to provide insights into owners according to:

1. How many acres they own
2. In what region of the country they own the land
3. How close they live to the land
4. Their timber-harvesting attitudes and behaviors
5. Their interest in protecting land from development
6. Extent to which they have given or intend to give land to family members
7. Whether or not their land is green certified
8. Whether or not they are “engaged” and/or “interested” stewards/managers of their forest

These categories were developed with input from the advisory committee about their particular interests. Data from the NWOS survey were cross-tabulated so that each of the above dimensions could be examined in detail.

In many cases (acreage, region, proximity, green certification), cross tabulating the data was a simple process. For example, to examine various attitudes of woodland owners by the amount of land they own, data were broken into four cells depending on reported land size (10-49, 50-99, 100-499, and 500-999 acres) and each cell was run by all questions in the NWOS, and thus compared. Other cross-tabulations required more judgment on our part. For example, we endeavored to define who among the owners are “engaged” (and non-engaged) stewards of their land, and the level of interest owners have in managing and using their lands for various objectives. This required a careful examination of each question and the extent to which it could reveal engagement or interest on the part of the owner. See page 9 for an in-depth description of how we define “engaged” and “interested” owners.
Who are Family Forest Owners?

- 4.2 million individuals, married couples, family estates and trusts, and other groups of unincorporated individuals who own 35% of all forestland in the continental U.S. (209 million acres)
- The vast majority are older, white males\(^2\), although 91% say that decisions are made by them and/or their spouse
- They mostly own small plots

\(^2\) Due to how the NWOS collects demographic information, these statistics refer to the “primary decisions maker.”
Some General Observations

- By and large they rank non-commercial reasons for owning their land much higher than commercial reasons—this is true regardless of whether or not they harvest timber or use their land for other income-producing activities.
- 70% of owners are “conservation minded” or “appear to be interested in protecting their land from development.”
- Interest/concern about legacy is high (76%).
- 44% have harvested trees for commercial purposes—only half used a professional forester for their last harvest.
- Relatively few (35%) are concerned about regulations restricting harvesting activities.
- Only 24% have received advice or information about the management of their land in the past 5 years.
- Though there seems to be no prevalent source of forest management information used by family forest owners, state/extension foresters reach more owners than any other source—but this is still extremely low (10%).
- Owners are most likely to say “talking with a forester or other natural resource professional” would be a useful way to learn about managing their forests—however, few owners say they have met with state foresters or other people who can help them, indicating that outreach efforts should be increased.
- Use of cost share programs, conservation easements and green certification is very low.
- Those who do have green certification on some or all of their lands are also more likely to have a conservation easement and participate in cost share programs. And they are three times more likely to say they plan to buy more forestland than owners without certification.
- Messaging efforts to reach most family forest owners should make use of media and other outreach avenues that effectively reach older (many retired), rural, white males. This coupled with publications distributed by professionals and available in local establishments—pamphlets, books, newsletters—should form the beginnings of any outreach campaign.
- Newspapers and television emerged as the most promising mass media avenues through which to communicate with family forest owners. Magazines, radio, and internet are not nearly as influential with this segment of the population.
- Based on the MRI data, the general population of older white males who own land possesses strong environmentalist impulses—two-thirds say they are willing to pay more for a product that is environmentally safe; to give up convenience in return for a product that is environmentally safe; and that helping to preserve nature is very important to them. Six in ten (62%) also say working for the welfare of society is very important to them. Nevertheless, nearly half (44%) consider themselves to be conservative. Therefore, environmentalism and social involvement are useful “buttons” to push, so long as they are done in the right way.
Generally speaking, owners in each region match the overall demographic and attitudinal profile of the general population of family forest owners. However, there are some interesting differences.

Pacific owners are more likely to be retired, and legacy concerns are highest in this region. They are the most concerned about regulations, taxes, lawsuits, theft, and endangered species. They are more likely to have harvested for commercial purposes and rank non-commercial reasons for owning their land higher than any other region. Pacific owners are markedly more likely to have a conservation easement on their land and have a higher awareness of green certification programs.

Mountain state owners have larger plots, are younger, better educated, and wealthier on average. There are more absentee and second home owners than in other regions. They are the least likely to have harvested, to have used a professional forester for their last harvest, and to have sought advice on managing their land.

Land investment is most important in the South and Mountain regions.

Legacy concerns are highest in the South Central and Pacific regions.

Use of a professional forester for timber harvest is lowest in the North Central and Mountain regions.

Conservation easements are markedly more common in the Pacific, South Central, and Mountain regions.

Awareness of green certification is highest in the Northeast and Pacific regions.

Hunting and recreation are most important in the North Central region.

Southern owners are more likely to have inherited their land or bought it from family members. They are more likely to state timber production as an important reason for owning their land (this is still only about one in four southern owners).
Engagement — Interest Segmentation

In order to get a better sense of how family forest owners approach the management of their lands, we built \textit{(a priori)} segments intended to stratify owners along two dimensions:

- Engagement: Are owners making purposeful decisions about the management and/or stewardship of their land?
- Interest: How interested are owners in practicing good land stewardship?

Based on the data available in the NWOS survey, we operationalized these two dimensions as follows:

\textit{Engagement}

“High Engagement” owners have done two or more of the following, “Moderate Engagement” owners have done one, and “No Engagement” owners have done none of the following:

- Have conservation easement
- Have lands currently green certified (weight = 2x)
- Used a cost share program in past 5 years
- Harvested trees using a professional forester
- Have a written management or stewardship plan
- Received advice in past 5 years

\textit{Interest}

“High Interest” owners meet three or more of the following criteria, “Moderate Interest” owners meet one or two, and “No Interest” owners meet none of the following:

- Own land to protect nature and biologic diversity
- Own land for cultivation/collection of non-timber forest products
- Own land for production of firewood or biofuel
- Own land for production of sawlogs, pulpwood, other timber products
- Own land for hunting or fishing
- Own land for recreation other than hunting or fishing
- Plan to get a conservation easement
- Plan to get green certification
- Plan to harvest sawlogs or pulpwood
Based on these definitions, we created a total of 9 owner segments:

<table>
<thead>
<tr>
<th>Owner Segment</th>
<th>% of Family Forest Owners</th>
<th>% of Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Engagement/High Interest</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>High Engagement/Medium Interest</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>High Engagement/No Interest</td>
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<td>2</td>
</tr>
<tr>
<td>Medium Engagement/High Interest</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Medium Engagement/Medium Interest</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Medium Engagement/No Interest</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>No Engagement/High Interest</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>No Engagement/Medium Interest</td>
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<td>24</td>
</tr>
<tr>
<td>No Engagement/No Interest</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

Based on this analysis, there is good reason to believe a social marketing campaign will reach people inclined to better manage their lands. This optimism is based on the size of segments that would seem receptive to messaging efforts:

- No Engagement/High Interest (18% of owners, 17% of land)
- No Engagement/Medium Interest (31% of owners, 24% of land)
- Medium Engagement/High Interest (7% of owners, 10% of land)

Together, these segments comprise over half of owners (56%) and half of family forest acreage (51%).

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3 In assessing the results of our segmentation, bear in mind that the segmentation was preliminary and further refined by an attitudinal segmentation resulting from a more sophisticated multivariate analysis. However, the two analyses are interdependent, as the definitions of level of engagement and level of interest were used to define the “loyals” and “write-off” groupings in the prime prospect analysis.
Prime Prospect Analysis

A key objective of the Sustaining Family Forests Initiative is to catalyze an entirely new marketing and communication process that will effectively reach 4 million family forest owners in the United States with credible, useful, and compelling information and services to enhance and extend sustainable forestry practices on family-owned forestland.

The prime prospect analysis is intended to help lay the groundwork for such an effort. Specifically, it is designed to answer three questions:

- Whom should sustainability/conservation initiatives target?
- What should the message be?
- What’s the best way to reach them with the message?

In order to answer these questions, two separate multivariate segmentations were performed on the NWOS dataset:

1. A segmentation of family-forest owners into four groups according to land-related attitudes and goals. This segmentation helps us understand how to reach and talk to family forest owners with different backgrounds and motivations for sound land management.

2. A Prime Prospect analysis that identifies and sizes the population likely to be receptive — and unreceptive — to messaging promoting good land stewardship. This segmentation, combined with the attitudinal segmentation, helps prioritize the targeting of any future communications efforts.

An Attitudinal Segmentation of Family Forest Owners

Family Forest owners may share many attitudinal and demographic characteristics, but they have varying reasons for owning their land and differing levels of engagement with it. Understanding the variety of family forest owners is critical to crafting a well-focused and effective communications program that speaks to different kinds of people with different motivations.

To identify how family-forest owners “cluster” with regard to their land-related attitudes and goals, a number of multivariate, hierarchical cluster analyses were performed on the NWOS dataset. A four-segment solution produced the most coherent segments, statistically and in terms of face validity.

The variables used in the segmentation were:

- Important reasons for owning the land (question 9 of the NWOS)
- Concerns regarding restrictions on woodland use (question 21)
- Future plans for the land (question 23)
The four segments are:

1. Woodland Retreat
2. Supplemental Income
3. Ready to Sell?
4. Working the Land

% of Total Owners in each Attitudinal Segment by Region

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Woodland Retreat</th>
<th>Supplemental Income</th>
<th>Ready to Sell?</th>
<th>Working the Land</th>
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<td>9</td>
<td>5</td>
<td>5</td>
<td>7</td>
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**Woodland Retreat**

Woodland Retreat Owners own their land primarily for the sake of beauty, privacy, conservation, and for legacy giving. They are particularly likely to have purchased the land themselves (generally relatively small plots), and to live on it. Commercial use of the land, including harvesting, is less common in this segment, but is still practiced by half. Demographically, they are similar to other owners — they are white males, older (many are retired), and generally are not college educated. Three in four own their land in either the Northeast (24%), North Central (24%), or South Central (23%)

This is the largest segment and comprises four in ten owners (40%); i.e., about 1,660,000 owners. Together they own 30% of privately held land on 10-999 acre plots, or approximately 62,500,000 acres.

Of the four segments, they are the most likely to own small plots (81% own 10-49 acres versus 72% of the total) and they have owned their land for the shortest period of time (63% versus 54%, respectively, have owned their land for less than 25 years). Most have their primary residence (73%), and 17% have a secondary residence, within a mile of their land.

Most purchased their land (82%) and they are among the segments most likely to have done so. One in four (23%) inherited their land. Relatively few have thus far transferred some of their land to others (23%).

**Implications for messaging**

If the goal is to encourage better, more sustainable land management, the message should be that maintaining privacy, beauty, and natural diversity is best accomplished through knowledgeable stewardship. It also helps keep the land intact and in good health for legacy giving. Commercial motivators, such as harvesting and investment, should be downplayed but not absent from any such messaging.

**Working the Land**

Working the Land Owners get the most out of their land. They are somewhat more likely than other segments to own larger plots and are among the most likely to have purchased the land themselves. They are the youngest segment, the most likely to be working, the least educated, and report the lowest incomes on average. This segment is the most likely to own land in the North (54%).

Compared to other segments, they cite a wide variety of reasons for owning their land — commercial, conservation, and recreational. They are the most likely to have harvested trees in the past five years and have definite plans for their land over the next five years. They are not more likely than other owners to have taken concrete steps such as certification or cost-share programs, however. They are the most worried about a range of potential restrictions on the use of their land.
This segment comprises 22% of owners; i.e., about 890,000 owners. Together they own 25% of the land on 10-999 acre plots, or approximately 51,000,000 acres.

Like the other segments, most own small plots (65% own 10-49 acres), but they are among the most likely to own larger plots (35% own 50+ acres compared to 28% of the total). Slightly more than half have owned their land for fewer than 25 years (54%). They are the most likely to have a residence within a mile of their land—80% have a primary residence and 45% have a farm/ranch there.

Most purchased their land (83%), and they are among the most likely to have done so. Relatively few (26%) inherited some or all of their land. About one in five (22%) have given some of their land away.

**Implications for messaging**

This segment seems likely to be receptive to messaging efforts on a variety of fronts. Since the segment is particularly engaged with the land—they live there, appreciate its beauty, consider it an investment, harvest trees, and use it for recreation—they will likely appreciate the need to more sustainably manage their woodlands. Messaging therefore should focus on the holistic benefits of good land stewardship.

**Supplemental Income**

Supplemental Income Owners own, on average, the largest plots of woodland and are the most likely to have inherited it. They are particularly likely to say they own their land for investment purposes and for the production of timber products. Legacy giving is also an important reason for them; indeed, legacy ownership seems to be top-of-the-mind to this segment—they are likely to have inherited the land themselves and they expect to pass it on to heirs.

They are concerned about insect and plant diseases, and the possibility of fire on their land. They are the most likely to have a cost-share program in place, but still are unlikely to have taken concrete steps like certification, easements, etc. Demographically, they are similar to other 10-999 acre owners—they are white males, older (many are retired), and generally are not college educated. Unlike other segments, however, two thirds own their land in the South (66%), either in the South Central (39%) or Southeast (27%) states.

This is the smallest segment and comprises 15% of owners; i.e., about 600,000 owners. Together they own 22% of the land in 10-999 acre plots, or approximately 46,000,000 acres.

Of the four segments, they are the most likely to own large plots (22% own 100 or more acres versus 13% of the total). About half have owned their land for 25 or more years, which is average. Most have their primary residence (63%) and 15% have a secondary residence within a mile of their land. Nearly half have a farm/ranch on the land (45%).
Most purchased their land (74%), but owners in this segment are the most likely to have inherited at least some of their land (38%). One in three (32%) have given some of their land away — they are the most likely to have done so.

**Implications for messaging**

If the goal is to encourage better, more sustainable land management, the message should be that both investment/commercial interests and the maintenance of privacy, beauty, and natural diversity are best accomplished through knowledgeable land stewardship. It also helps keep the land intact and in good health for legacy giving, a prime concern of this segment. Messaging should also stress that good management will reduce the risk of insect/plant diseases and fire.

**Ready to Sell?**

Ready to Sell? Owners show the least amount of engagement with their land. They are less likely than other groups to offer important reasons for owning their land, to have future plans for it, or to have concerns about its health or restrictions on its use. Moreover, they show little interest in learning how to better manage their land. They are the least likely segment to live within a mile of their land (though most do). Demographically, they are the oldest group but are otherwise similar to other 10-999 acre owners — they are white males and generally are not college educated. What most distinguishes this segment from the others is their apparent lack of interest in their land and their lack of stated plans for their land. They are most likely to live in the South Central states (28%), followed by the North Central (22%), Southeast (20%), and Northeast states (19%).

This segment comprises 23% of 10-999 acre owners; i.e., about 960,000 owners. Together they own 23% of privately held land on 10-999 acre plots, or approximately 47,000,000 acres.

Like the other segments, they are most likely to own small plots (72% own 10-49 acres). About half have owned their land for 25 or more years, which is average. They are least likely to have a residence within a mile of their land — only half say their primary residence (52%) or farm/ranch (46%) is there.

Most purchased their land (71%), but owners in this segment are among the most likely to have inherited at least some of their land (33%). One in four (26%) have given some of their land away.

**Implications for messaging**

This will be a difficult segment to reach given their lack of proximity and engagement with their land. If the goal is to encourage better, more sustainable land management, the message should be that there are resources to help them better manage their lands without their having to get particularly involved. Getting help makes sense for them if, given their advanced age, they want to maximize the value of their investment to pass on to heirs or to sell.
Prime Prospect Segmentation

In addition to the attitudinal segmentation, NWOS respondents were segmented using a multivariate “Prime Prospect” discriminant function analysis.

A Prime Prospect analysis essentially divides respondents into 4 groups that can be profiled by demographic, behavioral, and attitudinal variables available in the dataset. The four groups are:

- **Loyals (15% of NWOS respondents):** Owners who are actively taking steps to manage and/or conserve their land, and show a strong interest in continuing to do so. This segment was identified *a priori* according specific actions and attitudes reported by respondents. They are most likely to own land in the South (48%, particularly South Central, 31%), but a sizable number are in the North as well.

- **Prime Prospects (28%):** Those not currently practicing active land stewardship but who indicate they would like to and share certain predictive demographic and attitudinal variables with Loyals.

- **Write-offs? (13%):** Persons not performing the desired behaviors and who seem to have no interest or intention of doing so. This segment was identified *a priori* according specific actions and attitudes reported by respondents. They too are as likely to be found in the North (45%) as the South (46%).

- **Potential Defectors (44%):** Those currently performing some of the desired behaviors, but who indicate they are losing interest in it or otherwise face obstacles, and share certain predictive demographic and attitudinal variables with Write-offs. Like Prime Prospects and Write-offs, they are as likely to be found in the North (44%) as the South (43%).

The size of each segment is important. We estimate from our analysis that 15% of the population will reliably practice good land stewardship (Loyals) and that 13% will not (Write-offs?). When prioritizing communications efforts, it may not be the best use of limited time and resources to target efforts at these landowners.

We have also learned that Potential Defectors outnumber Prime Prospects (44% and 28%) and that we might expect to see a decline in good stewardship practices if outreach efforts are not forthcoming and successful.
As can be seen from the table and charts below, there are a few subtle regional differences. For example, the north central region has more than its share of prime prospects. On the other hand, the pacific and south central regions have more than their share of loyals. The south in general has more supplemental income owners, and fewer woodland retreat owners.
The following charts graphically represent the data from the table above, showing the proportion of each owner segment in each region.

What is the best way to target Prime Prospects and Potential Defectors? As we learned in our attitudinal segmentation, family forest owners have varying reasons for owning their land and different plans for it. Profiling the Prime Prospect segments by the attitudinal segments helps us understand whom to prioritize as our outreach targets and what messaging is appropriate.

<table>
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<tbody>
<tr>
<td>Woodland Retreat</td>
<td>%</td>
<td>%</td>
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<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Supplemental Income</td>
<td>25</td>
<td>19</td>
<td>31</td>
<td>22</td>
<td>42</td>
<td>32</td>
<td>48</td>
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<td>19</td>
<td>15</td>
<td>61</td>
<td>67</td>
<td>3</td>
<td>4</td>
<td>27</td>
<td>32</td>
</tr>
<tr>
<td>Working the Land</td>
<td>31</td>
<td>31</td>
<td>--</td>
<td>--</td>
<td>38</td>
<td>39</td>
<td>14</td>
<td>14</td>
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</tbody>
</table>

*Numbers represent the % of each “prime prospect” category that falls in each attitudinal segment*

As we can see in the table above, most Prime Prospects fall into the Woodland Retreat (32%) and Working the Land (38%) segments. Potential Defectors are most likely to fall into the Woodland Retreat segment, followed by the Ready to Sell? segment.
Looked at in a more strategic way, in the table below we see that Woodland Retreat owners are most likely to populate the Prime Prospect (12% of owners, 9% of the land) and Potential Defector (21% and 14%, respectively) segments — 33% of all owners and 23% of the land.

<table>
<thead>
<tr>
<th></th>
<th>Loyals</th>
<th>Write-offs?</th>
<th>Prime Prospects</th>
<th>Potential Defectors</th>
</tr>
</thead>
<tbody>
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<td>Land</td>
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<td>Woodland Retreat</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Supplemental Income</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ready to Sell?</td>
<td>3</td>
<td>4</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Working the Land</td>
<td>5</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>26</td>
<td>13</td>
<td>9</td>
</tr>
</tbody>
</table>

*Numbers represent the % of total population/acreage of family forest owners in the 10-999 acre ownership class*

Assuming we would want to target both Prime Prospects and Potential Defectors, we might start with messaging that would appeal to Woodland Retreat owners. That is, if the goal is to encourage more sustainable land management, the message should be that maintaining privacy, beauty, and natural diversity is best accomplished through knowledgeable stewardship. It also helps keep the land intact and in good health for legacy giving. Commercial motivators, such as harvesting and investment, should be downplayed but not necessarily absent from any such messaging.

The next priority would be to target Working the Land owners (17% of owners, 16% of the land), followed by Ready to Sell owners (12% and 12%, respectively) and then Supplemental Income owners (5% and 5%). Of course, well-crafted messaging could be effective across attitudinal segments given that they share many of the same demographic, behavioral, and attitudinal characteristics.

### Profiling the Family Forest Demographic in the Mediamark Database

To further our understanding of Family Forest owners, we mined the Mediamark (MRI) database. MRI offers comprehensive information on American demography, lifestyle, personal values, product usage and exposure to all forms of advertising media. It conducts more than 26,000 personal interviews with consumers annually throughout the continental United States and is the leading U.S. supplier of multimedia audience research. It provides information to magazines, television, radio, Internet and other media, leading national advertisers and over 450 advertising agencies—including 90 of the top 100 in the United States. Mediamark's national syndicated data are widely used by these companies as the basis for the majority of the media and marketing plans that are written for advertised brands in the United States.

While MRI does not specifically identify owners of 10-999 acres of woodland, it does allow us to profile Americans who closely fit their demographic—i.e., older white men (age 55+) who own 3 or more acres of land. We compared this demographic target with all other Americans on a number of questions pertaining to media usage, advertising effectiveness, personal values,
among other topics. The findings provide guidance on how to reach family forest owners, and what to say to them, in any future social marketing campaign.

**Reaching the target population**

Based on the MRI results, of the four media measured, two — newspapers and television — emerge as the most promising avenues through which to promote the family forest initiative with story placement and advertising.

*Newspapers*
Stories and advertisements placed in newspapers are particularly likely to be read, absorbed, and trusted. The target population includes many heavy newspaper readers. Half fall in the top two quintiles of newspaper readership compared to just 35% of the general population.

Solid majorities agree that newspapers “keep [them] up to date” (73%) and “are a good source of learning” (70%). Newspapers tie with television as the “media trusted the most” (31%).

The target population also has the nicest things to say, compared to other media, about advertising placed in newspapers: 58% agree that newspaper advertising “provides me with useful information about new products and services.” Few say such ads have “no credibility” (10%) or are “all alike” (16%).

*Television*
Many in the target population are heavy TV viewers. Though television is unlikely to be a key outlet for the initiative (because of high cost), it should be an important focus of story placement efforts.

Nearly half of the target population (45%) fall in the top two (“heavy”) quintiles of TV viewership, compared to just 26% of the general population. Solid majorities agree that TV “keeps me up to date” (78%), “is a good source of learning” (74%), and “gives me good ideas” (69%). Television ties with newspapers as the “media trusted the most” (30%). About half (52%) agree television advertising “provides me with useful information about new products and services.” Nevertheless, the target population is also most likely to say television advertisements have “no credibility” (37%) or are “all alike” (31%). And seven in ten (69%) agree that they “don’t make purchase decisions based on advertising.”

This population is less likely than other Americans to be heavy magazine readers (28% versus 42%, respectively) or radio listeners (29% and 48%, respectively).

The Internet is the advertising medium least likely to provide the target with “useful information about new products and services” (12% agree with the statement).

The target population, compared to the general population, is more likely to be involved with civic groups, particularly religious (11%), veterans (10%), charitable (9%), and fraternal organizations (7%). This suggests a proclivity to “get involved.”
Environmentalism and social involvement are useful “buttons” to push, so long as they are done in the right way. This population possesses strong environmentalist impulses. About two in three say they are willing to pay more for a product that is environmentally safe (65%), that they are willing to give up convenience in return for a product that is environmentally safe (65%), and that helping to preserve nature is very important to them (63%). Six in ten (62%) also say working for the welfare of society is very important to them.

Nevertheless, messages should not come from someone easily labeled as “environmentalist,” “tree hugging,” and the like. A conservative icon might be an effective celebrity spokesman. Not only is this population older, white, and male, it is also (predictably) more conservative than the general population (44% versus 37%, respectively, consider themselves either “very” or “somewhat conservative”). Moreover, they are likely to say traditional values such as respecting ancestors, duty, and “saving face” are very important to them.

Messages that tout the prospect for increased financial security might be particularly effective. This population feels less confident than the general public about their financial status and prospects. Only 21% say they are better off now than they were 12 months ago (compared to 30% of the general public). Looking ahead, only 22% predict they will be better off in 12 months; the general public is nearly twice as likely to make the same assessment (41%).

This population is cautious and more likely to be followers than leaders. Messages should therefore emphasize, if possible, becoming part of a venerable tradition rather than forging a new solution. Nearly half say they “often seek the advice of others before making a purchase” (46%), four in ten “usually like to wait until other people have tried things before I try them myself” (41% versus 32% of the general public), only 38% say they “like to lead others” (compared to 46% of the general public), and a mere 19% say “I’m always one of the first of my friends to try new products or services.”