

VALUES AND MOTIVATIONS OF PRIVATE FOREST OWNERS IN THE UNITED STATES: A FRAMEWORK BASED ON OPEN-ENDED RESPONSES IN THE NATIONAL WOODLAND OWNER SURVEY

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Abstract .—The National Woodland Owner Survey (NWOS) is a recurring and comprehensive national survey of private forest landowners in the United States, and is a social complement to the U.S. Forest Service Forest Inventory and Analysis program's biologic resource inventory. An open-ended question in the NWOS explores private forest owners' motivations and values related to their woodland. This paper describes the system of values and motivations that emerged from analysis of responses to the open-ended question. Respondents expressed diverse and multidimensional motives. Six broad categories and 30 subcategories of motives and values emerged from the analysis. The broad categories were environmental values, recreation, investment/income, non-instrumental values, home/quality of life, and incidental ownership. The breadth and diversity of forest landowner motives pose challenges and opportunities for forestry professionals working with or attempting to reach family forest owners.

1.0 INTRODUCTION

The National Woodland Owner Survey (NWOS) was initiated in 2002 by the Forest Inventory and Analysis

(FIA) program of the U.S. Forest Service, and is a periodic, comprehensive national survey of private forest landowners. The NWOS is a social complement to the FIA program's biologic resource inventory and contacts approximately 6,500 private forest owners from across the United States each year (Butler et al. 2005). The purpose is to provide educators, service providers, policy administrators, researchers, and others interested in family forest owners with an understanding of the following issues: Who are the forest landowners? Why are forest lands owned? How are forest lands used? What are the owners' plans for their forest lands? (Butler and Leatherberry 2004).

The NWOS includes an open-ended question which asks, "What is the main reason that you own woodland in [your state]?" Responses to this question are a rich source of information about private forest owners' motivations and values, but these responses have not previously been analyzed. The overall objective of the broader study of which this paper is a part is to analyze the responses to the NWOS open-ended question in order to shed additional light on private forest-land ownership and explore the relationship between reasons for owning woodland and close-ended responses in the NWOS, analyzing questions such as: Do the motivations for owning woodland vary geographically? What demographic factors are associated with differences in motivations for owning woodland? How are ownership motivations tied to other ownership characteristics (e.g., tenure of forest ownership, size of landholdings, and forest management practices)?

The focus in this paper is on one aspect of the broader study: describing the system of values and motivations that emerged from analysis of the open-ended responses in the NWOS. Diverse and multidimensional motives were expressed by respondents. The diversity

and breadth of forest landowner motives pose challenges and opportunities for forestry professionals working with or attempting to reach family forest owners.

2.0 METHODS

The NWOS is implemented annually, with survey cycles for individual states ranging from 5 to 10 years. The annual design means that each year, a randomly selected portion (10 to 20 percent) of the full sample of private forest owners in a state is contacted. See Butler et al. (2005) or www.fia.fs.fed.us/nwos for a copy of the survey instrument and details on developing the survey, the sampling design, implementation, and statistical estimation procedures.

This paper discusses a preliminary analysis of responses to the NWOS open-ended question about a landowner's main reason for owning his or her woodland. The data analyzed in this paper were collected from the 15,440 family forest owners who participated in the NWOS in the United States between 2002 and 2006.

A variety of approaches to analyzing textual data have been used in natural resources (see Bengston [2000] and papers cited therein). In this study, the open coding method was used to identify ideas and themes expressed by respondents, an approach that is well suited to capture rich themes and uncover unanticipated issues. Briefly, this method involves a careful reading of the textual data (or in this study, a random sample of the data due to the unusually large volume of text), developing a draft outline of recurring themes, reconciling differences between the outlines of the different analysts, and cross-referencing each theme back to the original text. See Strauss and Corbin (1998) for details on the open coding method.

Responses to the open-ended question ranged from single words (e.g., "hunting," "firewood,") to in-depth descriptions of multiple motivations and deeply held forest values. Many respondents listed multiple motivations and values, even though the question asked for the "main reason" for owning their

woodland. We coded the first three reasons if they mentioned that many. Some responses consisted of blended or intermingled reasons for owning forestland, rather than listing discrete reasons. In these cases, the response was coded for each of the individual reasons. For example, the response "investment for children" was coded as both Investment and Family Heritage / Legacy, and the response "For the beauty of God's creation" was coded for both Aesthetic value and Spiritual / Religions value.

3.0 RESULTS AND DISCUSSION

NWOS respondents revealed a wide range of values and motivations for owning forest land. As shown in Figure 1 and described in this section, six broad categories emerged, with 30 subcategories of specific values and motivations.

3.1 Environmental Values

First, a variety of values and motivations related to protecting the forest environment or certain benefits directly provided by forest ecosystems was mentioned by some landowners as a motivation for owning their land. This broad value category contained the following four dimensions or subcategories that were coded separately:

Environmental Protection includes wide-ranging expressions of the importance of environmental protection, preservation, conservation, or stewardship of the land. Examples include: "I am a steward of the land, not just an owner," "to protect it from being destroyed," "to help preserve America," "holds world together," "reforestation, have planted 1800 seedlings."

Owning woodland to *Stop Development* consisted of expressions of the desire to stop irresponsible or encroaching development by maintaining undeveloped forest, or the view that the woodland serves as a buffer between the landowner and nearby developed land. In some cases, stopping development may serve to protect more fundamental values, such as quality of life, privacy, or conservation. Examples include: "Much of the development in my area is irresponsible

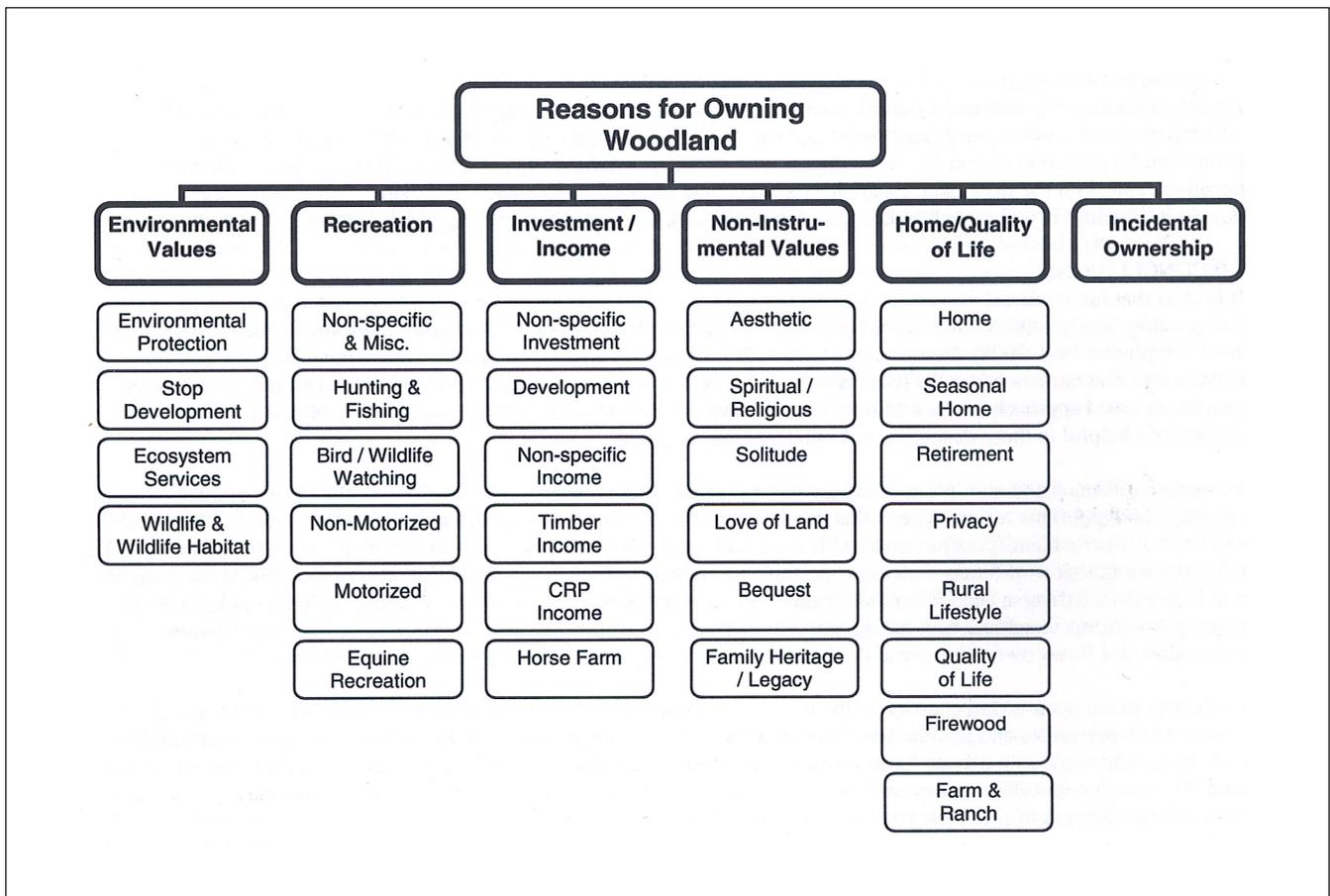


Figure 1.—Private landowners’ reasons for owning woodland.

and I want to do my best to preserve natural habitat,” “Keep people from putting houses on it,” “Privacy, to keep it away from developers and other environmental rapists,” “We like woodland and it makes us sad how it’s all being developed.”

Regarding *Ecosystem Services*, a variety of tangible ecological benefits that woodlands provide are included in the subcategory of woodland values, such as providing a windbreak, shade for cattle or a home, soil stabilization and preventing erosion, clean air and water, flood control, and carbon sequestration. In recent years, the definition of ecosystem services has expanded to include all direct and indirect benefits and values of the environment (e.g., Millennium Ecosystem Assessment 2005). We have chosen a narrower and more traditional approach to defining ecosystem services. Examples of expressions of

Ecosystem Services include: “weather barrier,” “shade and coolness, comfort,” “aid soil conservation, stabilizes stream bank,” “I feel by growing trees I am helping to conserve our top soil and to remove the excessive CO₂ from the air,” “its contribution to water supply protection and preservation of air quality.”

Wildlife and Wildlife Habitat includes statements of the significance of specific wildlife species, non-specific references to wildlife, and wildlife habitat and habitat improvement, but no mention of hunting. This category could have been included under *Ecosystem Services*, but was coded separately because it was mentioned so frequently. Examples include: “to provide homes for wildlife,” “like to save it for wildlife,” “wildlife enhancement,” “for birds and animals,” “give the birds and animals a safe haven – all creatures deserve a place in the world.”

3.2 Recreation

Forest-based recreation was a second broad category of landowner values and motivations expressed by NWOS respondents (Fig. 1). This category encompasses six subcategories:

Nonspecific and Miscellaneous recreation is a catch-all category for recreation that does not fit in the specific and more common categories listed below. This category included general mentions of outdoor recreation, such as “recreation” and “personal recreation,” as well as a variety of infrequently mentioned specific recreation activities such as “picnicking” and “shoot skeet and just relax.”

Hunting and Fishing was a frequently expressed motivation for owning woodland and included general references to hunting, fishing, and trapping, and also hunting of specific animals. Examples include: “to have a place to hunt,” “fishing,” “love to hunt,” “hunting deer, small game, turkeys,” “less crowded hunting.”

Bird and Wildlife Watching includes all mentions of watching, viewing, seeing, or enjoying wildlife. Examples include: “bird watching,” “watching wild animals and birds,” “I enjoy seeing wildlife,” “to enjoy wildlife.” General references to “wildlife” were coded as the subcategory *Wildlife and Wildlife Habitat* above rather than here.

Nonmotorized Recreation includes the full gamut of activities such as walking, hiking, snow shoeing, cross country skiing, and bike riding. Examples include: “enjoy walking through the woods,” “love to walk the woods and trails,” “cross country ski,” “riding bikes.”

Motorized Recreation includes the full range of motorized recreation activities, such as “ride motorcycles,” “snowmobile,” “dirt bike riding, 4-wheeler riding,” “ATVing,” “4X4 riding.”

Equine Recreation included general mentions of horses and specific reference to equine recreation, but not descriptions of horse farms or commercial horse operations, which were included as a subcategory

under “Investment and Income.” Examples include: “he has horses,” “for my kids to ride their horses,” “riding our horses,” “enjoy life in the country, have a few horses.”

3.3 Investment / Income

A third broad category of woodland value shown in Figure 1 is “Investment / Income,” which is concerned with present or future monetary gain from forest land ownership. Investment / Income consists of six subcategories:

Nonspecific Investment includes a wide range of general expressions of the importance of woodlands as investments. Examples include: “safest place to put money,” “land is a good investment,” “hedge against inflation,” “college fund,” “good nest egg for future,” “investments for the future – no stocks, bonds, etc., just property.”

Development was a second subcategory of Investment / Income. In most cases, landowners did not specify the type of development they planned for their woodland, but some specified residential, commercial, industrial, or agricultural development. Examples of expressions of this subcategory include: “development property,” “future development,” “industrial site potential,” “purchased for development of a golf course and homesites.”

Nonspecific Income included general references to income generation benefits of woodlands and infrequently mentioned specific sources of forest-based income. Examples include: “to make money,” “livelihood,” “revenue generation,” “income for retirement,” “lease it for cattle grazing,” “income from hunting leases,” “game bird farming.”

Timber Income included all mentions of producing wood for sale or for supplying a family-owned sawmill. Examples include: “Income from timber sales – this land has provided a living for four generations of one family. If you take care of it, it will take care of you,” “supply sawmill,” “to produce project for sawmill to make the economy run,” “timber revenues,” “grow and sell timber.”

Conservation Reserve Program (CRP) Income was mentioned infrequently but coded separately because it is a unique source of income and typically involves reforestation. Examples include: “row cropping ceased so we planted pines on CRP program,” “CRP provided revenue,” “government payment for planting pine trees,” “inherited the land in 1976, was in row crops now CRP pine.”

Finally, expressions of the subcategory *Horse Farm* were rare, but they included: “horse farm,” “horse trails for my horse farm,” “raise cattle and horses,” “part of our horse ranch/farm business.”

3.4 Non-Instrumental Values

A fourth main category was labeled “Non-instrumental Values,” which encompasses a variety of intrinsic or intangible values and psychological experiences and benefits associated with forests. Six distinct types of non-instrumental values were expressed by forest landowners:

Expressions of the *Aesthetic* value or beauty of woodlands ranged from mild (e.g., “like to look at it,” “nice setting”) to deeply emotional (e.g., “of all the land on earth, it’s the most beautiful”). Other typical examples include: “raw beauty,” “I enjoy the beauty of nature,” and “beautiful old oak trees.”

Spiritual / Religious values expressed landowners’ spiritual connection with their land. Examples of this motivation include: “enjoy God’s creation,” “to be close to God’s creation,” “regenerates one’s inner spirit,” “This is where my maternal grandfather bought this land in 1926 – raised several children. I feel this land is sacred ground,” “love of the trees that the Lord was kind enough to let us enjoy,” “it’s a blessing to live in Eden.”

The motive *Solitude*, as expressed by NWOS respondents, encompasses several closely related concepts, including solitude, peacefulness, serenity, tranquility, quiet, refuge, and remoteness. *Solitude* is an inner-directed, frequently cited psychological benefit from nature, and although it can often be experienced negatively (Long et al. 2007), NWOS

respondents expressed solitude only as a positive motive. In contrast to *Solitude*, the subcategory *Privacy* (under the broad category “Home, Quality of Life”) is motivated by separating oneself and one’s residence from neighbors or others. *Solitude* examples include: “can’t live without trees solitude,” “calming space in our lives, personal refuge,” “quiet peacefulness,” “I like the peace of the woods,” “a get away place that’s quiet, peaceful, beautiful, feel the loneliness of nature.”

Landowners who expressed *Love of Land* or love of place have a deep affective attachment to their forestland. Examples include the following: “I love it and all of nature,” “can’t live without trees,” “love the land! The great outdoors,” “I love and cherish the trees,” “because there is nothing greater than a woods.”

Bequest value refers to passing woodland on as a legacy for future generations. The focus is on future generations in general, rather than a bequest to one’s children or grandchildren. This motivation for owning woodland was deeply held but not frequently expressed. Examples include: “leave for future generations,” “to protect nature for future generations,” “invest for future generations,” “we own woodland because we wish to save it for others to enjoy after we are gone.”

Family Heritage / Legacy was a commonly mentioned motivation for owning woodland, and contains several distinct dimensions: family heritage, family legacy, family general, and inherited. Examples of these four dimensions of *Family Heritage / Legacy* include: “original family homestead,” “Our land is very valuable to us because it has been in our family since 1818. Many of our loved ones for generations are buried here” (family heritage); “pass down to children,” “I might not have money to leave my children but they’ll have land and that’s priceless” (family legacy); “part of family land,” “raise family,” “keeps family together,” “a family retreat” (family general); and “it was part of the inheritance,” “inherited from parents” (inherited).

3.5 Home, Quality of Life

The fifth broad category of responses was termed “Home, Quality of Life.” This was the largest and most frequently expressed value category, and it comprises the following eight subcategories:

Home refers to the current or future primary residence for the landowner. Examples include “home sweet home,” “joins the one acre my home is on,” “possible future home,” “it’s where I live.”

Seasonal Home includes woodland as a setting for a seasonal or weekend home or cabin, or a potential site for a future seasonal home. Examples include: “summer home,” “plan on building a cabin,” “cabin site,” “vacation property,” “summer residence.”

Retirement refers to a current—or more often future—place to retire and live. Examples include: “place to retire,” “future retirement,” “to retire in the woods,” “to live my retired life in the country.”

Privacy was frequently mentioned as a motivation for owning forest land. In some cases, landowners expressing this motive give the impression of being hermits in the woods, e.g., “I really don’t want to see anyone after work,” “I like to be surrounded by forest and to be isolated from people.” Other, more typical expressions of this value included the following: “I like my privacy,” “to be semi isolated,” “no close neighbors, no screaming kids, no barking dogs, peace and quiet.”

Responses coded as *Rural Lifestyle* included the value of living in the country and close to nature, as well as a disdain for urban and suburban life. Examples include: “country life is the best,” “love living in the country and near nature,” “prefer rural vs. city or town,” “woodland is important to our way of life,” “don’t like big city life,” “hate city development.”

Quality of Life is a very broad subcategory of woodland ownership values, and includes non-specific expressions of enjoyment or pleasure (e.g., “for pleasure,” “just to enjoy”), pride of ownership (e.g., “self satisfying to own land,” “joy of owning it!”), general nature appreciation (e.g., “like woodland,” “to

enjoy nature,” “we’ve always been drawn to wooded properties. Quality of life issue”), unspecified personal use (e.g., “personal use,” “private use,” “hobby”), and miscellaneous quality of life (e.g., “quality of life,” “stress management”).

Firewood for heating the landowner’s home was mentioned fairly often as a reason for ownership. Examples include: “heat with wood,” “because we burn wood to heat our home.”

Farm and Ranch is another broad subcategory, with four distinct dimensions: Incidental to farm or general farm (e.g., “it (woodland) was on the farm when I bought it,” “part of our farm,” “farming”), woodland not tillable (e.g., “unfarmable land,” “land too steep to farm”), pasture for cattle (e.g., “to raise cattle,” “part of cattle ranch”), and tree farm (e.g., “tree farm,” “Xmas trees”).

3.6 Incidental Ownership

Finally, responses that did not fit in the above categories were coded in a category called “Incidental Ownership,” which included the views that (1) the woodland was simply part of the property and ownership was incidental, (2) the owner had no particular reason for ownership or was unwilling to express a reason, and (3) the owner associated a negative value with the woodland. Examples include: “just part of the property,” “it’s there,” “no good reason,” “just bought it,” “won it in a divorce,” “not worth clearing, poor land,” “cost too much to take it off.”

4.0 CONCLUSIONS

It is clear that family forest owners have many diverse reasons for owning forest land. Many past approaches to categorizing family forest owners have been based on quantitative analyses of close-ended questions (e.g., Butler et al. 2007, Majumdar et al. 2008). Compared to these approaches, we were able to discern greater nuances among the reasons and find more depth in the reasons provided. The two approaches are complementary in that the quantitative provides a broad approach that is useful for coarser

classification and ours provides the finer-level detail that should be particularly helpful to those designing and implementing programs.

Many respondents listed multiple motivations and values, even though the question asked for the “main reason” for owning woodland. This result suggests that owners often hold a variety of important values related to their forest land and have difficulty identifying just one that is most important. The diversity of forest values, ownership objectives, and management practices of family forest owners must be embraced. From a sustainability perspective, this broad outlook will help ensure a diverse and vibrant landscape. From a social perspective, this approach may hold one of the keys to helping Americans reconnect with nature. From an individual forest owner’s perspective, the multiple and diverse motivations for forest ownership are at the heart of her or his enjoyment and stewardship of the forest.

Responses to the open-ended question in the NWOS represent a rich, large, and previously unanalyzed database of woodland owner values and motivations. Further analysis of this unique source of data will provide extension foresters and others who work with private forest owners important insights and help guide public policy related to private forest land. For forestry educators, policy makers, and service providers to be effective, it is imperative that they see the forest land through the eyes of the forest owners (Butler et al. 2007).

5.0 CITATIONS

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