

Abstract

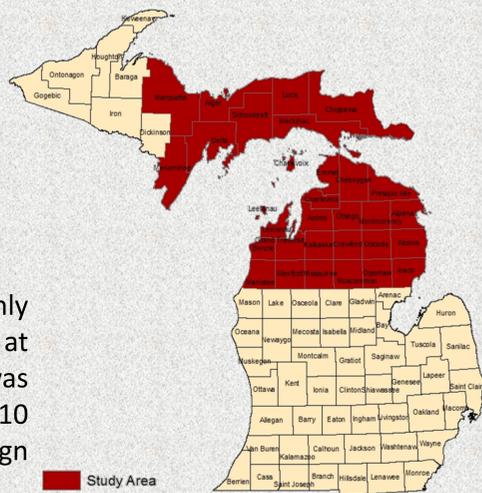
Past studies have identified nonindustrial private forest (NIPF) owners to be a heterogeneous group of people who value their forests for varying reasons. This study is an attempt to explore the effectiveness of different communication methods targeted at NIPF owners and to identify the methods deemed most useful by them based upon their forest ownership reasons. Given that extension services have limited budgets, our results suggest audience segmentation and tailoring communication methods specific to target audience to be an effective approach for getting the most bang out of the buck.

Introduction

NIPF owners in Michigan have been identified as a group that is difficult to reach with informational forestry materials. These forest landowners tend to manage their forests for different reasons ranging from wood production to nature conservation, recreation and privacy. Our assumption is that if landowners are presented with information in a form which suits their land ownership objectives, they are more likely to respond in a positive manner towards forest management. Also as landowner preference for forest ownership is different, so can be the ways in which they desire to receive informational materials. Hence to explore the current usage pattern of communication materials as well as to understand the preference for different communication methods by landowners based upon their forest management objectives, data collected from the 2010 mail survey of NIPF owners in northeastern Michigan was analyzed.

Study Area

The study area includes 29 counties located in the north-eastern region of Michigan.



Survey Design

A mail survey of 1,600 randomly selected landowners owning at least 20 acres of forest area was conducted in the fall of 2010 using the Tailored Design Method. The overall response rate after taking into account the undeliverable addresses was 39%.

Statistical Analysis

K-means cluster analysis was applied to identify different landowner segments based upon a question which gave eleven reasons for owning forest land. Landowners ranked the reasons according to a Likert scale giving a value in accordance with the importance they placed on each reason specifically. Parametric and non-parametric statistical tests were then applied to identify differences in the

communication methods used and preferred by landowners among the groups.

Results

Cluster analysis revealed four distinct groups of landowners in North Eastern Michigan. The clusters were given names according to their ownership characteristics.

Table 1. Median response for owning forest land by cluster

Ownership reasons	Cluster1	Cluster 2	Cluster 3	Cluster 4
To enjoy beauty or scenery	Somewhat Important ^b	Very Important ^a	Very Important ^a	Very Important ^a
Protect nature	Neutral ^c	Very Important ^b	Very Important ^a	Very Important ^a
For landinvestment	Somewhat Important ^a	Neutral ^b	Somewhat Important ^a	Somewhat Important ^c
Home, vacation, farm, ranch	Neutral ^c	Very Important ^a	Very Important ^a	Very Important ^b
For privacy	Neutral ^c	Very Important ^a	Very Important ^a	Very Important ^b
Bequest	Somewhat Important ^a	Neutral ^b	Neutral ^{ab}	Very Important ^c
Non timber forest products	Unimportant ^a	Not Important ^b	Unimportant ^a	Neutral ^c
For firewood or biofuel	Neutral ^a	Neutral ^b	Neutral ^{ab}	Somewhat Important ^c
For production of timber	Somewhat Important ^a	Unimportant ^b	Neutral ^c	Somewhat Important ^d
For hunting and fishing	Very Important ^b	Very Important ^a	Unimportant ^c	Very Important ^a
Other recreation	Neutral ^b	Very Important ^a	Neutral ^b	Very Important ^a

Like superscripts denote no significant difference

Cluster 1. Consumptive use landowners (N=90)

Only 13% of landowners belonging to this group reside on their forest property. They value hunting and fishing as their most important reason for owning forest land. In addition to this, they show an interest in timber, land value and bequeathing forest land to their heirs.

Cluster 2. Recreationists (N=151)

The important motivations for forest land ownership among the recreationist group are; recreation activities other than hunting or fishing, hunting and fishing, privacy, forest land as a part of their home, vacation home, farm or ranch, to protect nature and biologic diversity, and to enjoy beauty or scenery. They seemingly place little value on the consumptive or monetary values that the forest has to offer.

Cluster 3. Naturalists (N=70)

Landowners in this group indicate that the values of enjoying beauty and scenery, protecting nature and biologic diversity, forest as a part of their home, vacation home, farm or ranch, and privacy are very important to them. Land investment is also somewhat important to this group. However, hunting and fishing was significantly less valuable to them.

Cluster 4. Multiple objective landowners (N=193)

A majority of landowners (38%) in our study area formed this group. These landowners in response to forest land ownership importance questioning, displayed a wide variety of values, with a majority being significantly higher than all other groups.



Fig 1. Communication methods used by landowners in the past

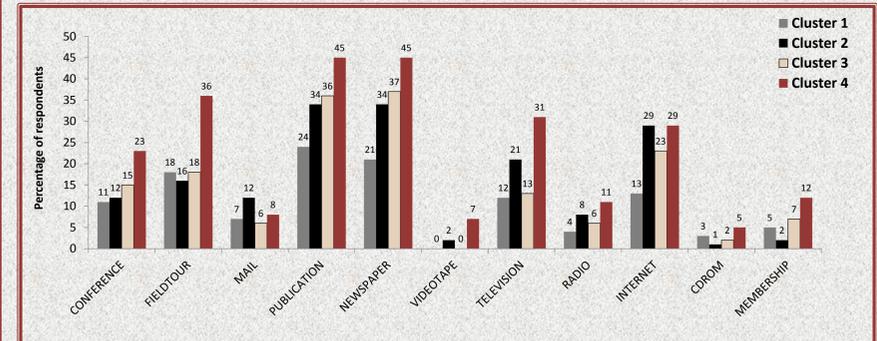
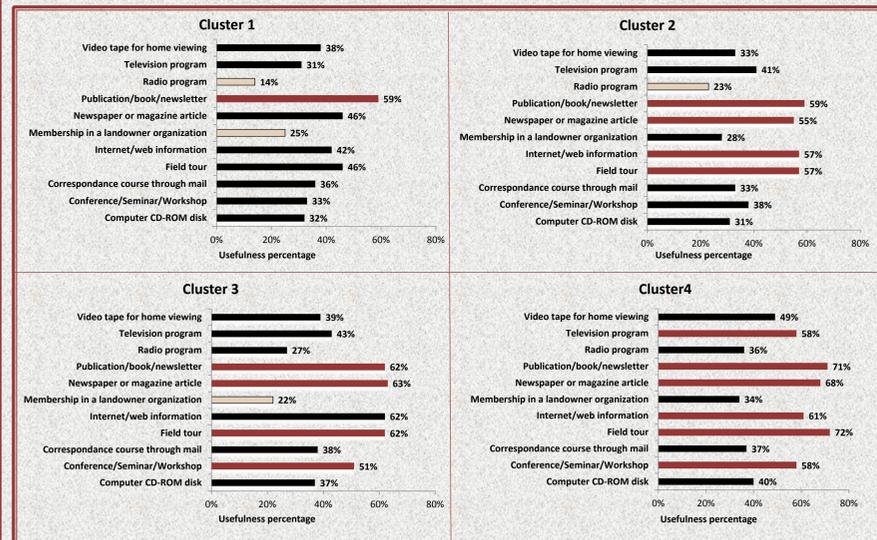


Fig 2. Communication methods deemed useful by landowner clusters



Conclusion

Based upon our results, NIPF owners in Michigan can be grouped according to their land ownership reasons. These groupings tend to differ in the amount of communication methods they have used in the past and the way they prefer to receive forestry information in the future. In general, however, a common pattern of communication usage and preference was observed among the respondents. Publications/books/newsletters, field tours, newspapers or magazine articles, and internet/web information were found to be the most commonly used and preferred by the respondents. Since a handful of communication methods were identified as useful to all, it is advisable to use these in a mixed audience. Accounting for the similarities and differences between the landowner groups that have been found, it is advisable when conducting forestry outreach to identify the audience and the ways they prefer to communicate. Outreach materials should then be tailored based upon the preferences of the target audience rather than following a blanket approach.