NIPF Management in Kentucky: Is the Primacy of Timber Management Really Passé?

by

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Abstract

Two recent surveys queried nonindustrial private forest landowners in Kentucky on their forest land goals, attitudes about timber harvesting, and methods of forest planning. The first survey focused solely on the membership of the Kentucky Woodlands Owners Association (KWOA) while the second survey sampled all NIPF landowners in the state. Kentucky has approximately 12.4 million acres of forest land, 91% of which is owned by some 400,000 individuals. The surveys reveal that KWOA members place a higher priority on timber revenue than the general NIPF landowner population, who state that their management goals are oriented toward wildlife, recreation, or aesthetic values rather than timber production. Both KWOA landowners and the general NIPF landowner population recognize the need for forest planning, but only the KWOA landowners are actually receiving management assistance in large numbers. Also, when it comes to timber harvesting, the general NIPF landowner population is much more concerned with maximizing revenue than KWOA members.

INTRODUCTION

Timber management is the management of forest land primarily for fiber production with the aim of maximizing either volume or economic return. It is a subset of forest management in that forest management includes all forest resources, including, but not limited to, water, soil, wildlife, and recreation resources. Forest management is not primarily timber oriented, although it still is concerned with principles of economic efficiency.

Today, few foresters would argue that the primacy of timber management continues on public lands, and the question arises, is the primacy of timber management on private lands also passé? Nonindustrial private forest (NIPF) comprises 30% of forest land in the United States with higher percentages in the eastern U.S. (Birch 1996). In Kentucky, some 91% of all forest land is categorized as NIPF land (Alerich, 1990). Within Kentucky, the management of NIPF lands determines the future of timber supply in one of the nation’s leading hardwood producing states (Wharton et al 1992).

This study is based on results of two recent surveys of Kentucky NIPF landowners (Gracey 1997). Using data from these surveys, the question of timber primacy on Kentucky NIPF lands will be addressed.

METHODS

In 1995, a written survey was sent to all members of the Kentucky Woodland Owners Association (KWOA). A similar phone survey of all NIPF landowners in Kentucky was completed later that year by the University of Kentucky Survey Research Center (UKSRC).

Several categories of questions were asked in each survey, including reasons for owning forest land, knowledge of and ability to find management assistance, reasons for or against timber harvesting, timber harvesting objectives, timber management practices, and demographics of NIPF owners.

The written KWOA survey was sent to all 150 members, a mail survey was chosen for cost effectiveness. The statewide survey was conducted by telephone and compiled by the UKSRC and due to the large size of the survey, this was considered the best method. While the two survey methods differ, the questions were as similar as possible given the two formats to allow for comparisons between these two groups.

RESULTS AND DISCUSSION

The response rate for the KWOA written survey was 77% (115 responses). This was accomplished with a single follow-up mailing and was deemed adequate for that population. For the statewide phone survey, the response rate was 70% (1352 responses). 602 respondents were landowners and 430 owned ten or more acres of forest land. This response rate was also considered adequate for the population. No test for nonresponse bias was done for either group.

Owner Characteristics

Figure 1 illustrates that KWOA owners are generally more educated than the average landowner.

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**Figure 1.** Education levels of Kentucky NIPF owners.

Correspondingly, income levels for KWOA members are also higher (Figure 2). However, the Kentucky statewide mean income is approximately $20K, so forest landowners in general are wealthier than the average citizen.

**Figure 2.** Income for Kentucky NIPF owners.

When comparing KWOA members to all Kentucky NIPF owners, it can be seen that KWOA members own larger tracts of forest land (Figure 3) and hold forest land for longer periods of time (Figure 4). Due to economies of scale and the time period involved in timber production, both these factors make timber management more feasible for KWOA members. It is also worth mentioning that KWOA members are more likely to be absentee owners of their forest land.

**Reasons for Owning Forest Land**

KWOA members are more oriented toward timber production than the general Kentucky NIPF landowner population (Figure 5). However, the general NIPF population is interested in land investment and farm and domestic use more than the KWOA members.

**Figure 3.** Size of Kentucky NIPF tracts.

**Figure 4.** Tenure of Kentucky NIPF ownership.

**Figure 5.** Reasons for owning forest land.

They also appear to view holding the land to give to their children as a more important reason than KWOA owners.
Management Assistance
Ninety-six percent of KWOA members have received some form of management assistance from either state foresters or county cooperative extension service (CES) agents. This contrasts sharply with the general Kentucky NIPF population. Although 85% knew a source of assistance, only 13% have received assistance in the past. However, 64% stated they would seek assistance for future management actions. Whether or not this desire will translate into action and how to encourage its fruition is a pressing issue for natural resource management agencies in Kentucky.

The statewide survey also found that 58% of all NIPF landowners had cut timber in the past or were considering cutting timber in the future. Of those who had harvested or were considering harvesting, the survey asked if any portion of their land was reserved from harvesting. When these areas are combined with the 42% of landowners that stated they would not harvest in the future, nearly 49% of Kentucky’s NIPF forest acreage, or five million acres, are reserved in the short term from any timber harvests.

Timber Management Practices
All of the KWOA members had harvested in the past or were considering harvesting in the future. The reasons for harvesting timber are vastly different between KWOA members and the general Kentucky NIPF landowner population (Figure 6). KWOA members are harvesting timber based on either biological or financial maturity while the general forest landowner population is much more interested in income from timber. This implies an absence of management on most Kentucky forest lands.

Landowners who had harvested in the past were asked about the actual harvest methods, specifically, who chose the area to be harvested (Figure 7), who selected the trees within that area (Figure 8), and the cutting practice used (Figure 9).
From this it can be seen that KWOA members are using foresters much more than the general NIPF landowner population. For both groups, selection harvesting is the overwhelming cutting method of choice. In the case of KWOA members, 47% of the time this is guided by a forester, however, for all other NIPF lands in Kentucky, a forester is involved only 6% of the time. Again, a general lack of management on Kentucky NIPF lands is evident.

Figure 10 shows reasons both groups gave for not harvesting timber. It is apparent that KWOA members are not harvesting timber until it is mature while the general Kentucky NIPF landowner population views this as a preservation issue.

[Figure 10. Reasons for NOT harvesting timber.]

**Future Forest Management**

Several questions concerning future forest management were asked of each group. Both groups overwhelmingly believed that timber harvesting could be done in an environmentally sensitive way (Figure 11), so the resistance of many landowners to harvesting on their land for preservation is not a hard belief that logging destroys forests.

[Figure 11. Can harvesting be done in an environmentally sensitive way?]

Landowners where then asked about selective logging and clear cutting. Figure 12 shows the response to the statement, “selective logging is the best cutting practice” and figure 13 shows the response to the statement, “clear cutting can be an acceptable timber harvest practice.”

KWOA members were much less likely to believe that selection logging was always best and were far more likely to believe clear cutting could be an acceptable hardwood forest management tool. Nearly half of the general NIPF landowner population felt that clear cutting was entirely unacceptable.

Two questions related to forest regeneration were asked. Both KWOA and the general NIPF landowner population felt that commercial species

[Figure 12. Is selective logging best?]

[Figure 13. Can clearcutting be acceptable?]
region, but over one-third (36%) of the general NIPF landowner population felt artificial regeneration was necessary (Figure 15).

Finally, both landowner groups were asked, "what is the average per acre value of timber in Kentucky?" Overwhelmingly, the response was, "Don't Know" and is depicted in figure 16. This may indicate that landowners in Kentucky are truly ignorant of timber values or they might have opinions about the value of their timber but not that of the average landowner.

CONCLUSION
From these results, we see that a surprising number of landowners and NIPF lands in Kentucky are, at least in the short-term, reserved from timber harvesting. And the primary management goals on most NIPF lands are not-timber oriented but revolve around maintaining a forest to pass down to future generations.

However, landowners also strongly expressed the opinion that timber harvesting could be done in an environmentally-friendly way. And most landowners have a strong desire to return income from their property. They feel that commercially valuable species should be favored in Kentucky's next forest.

To add fuel to the arguments for timber management, most landowners have a very limited knowledge of hardwood silviculture or the potential value of timber in the state. And perhaps more troubling is the lack of professional assistance actually being applied to timber harvest or other activities on Kentucky's NIPF lands.

For foresters, timber management may be passé, but most forest landowners would benefit a great deal and fulfill many of their management objectives by paying more attention to the basics of timber management.

Literature Cited

