Does New Large Private Landownership and Their Management Priorities Influence Public Access in the Northern Forest?

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ABSTRACT

The Northern Forest spans New York and three New England states and contains over 26 million ac, making it the largest contiguous forest east of the Mississippi. Most of the forest land is privately owned and public access to private land is a time-honored tradition in the region. Residents fear this tradition of open access may be threatened by recent acceleration in land tenure change across the region. We surveyed those who own 1,000 ac or more in the four-state region and found that newer owners were not more likely to post their land. There was, however, a correlation between the owners' land-management priorities and recreational activities permitted on the parcel. Results indicated that timber/forest product companies and Real Estate Investment Trusts allowed more public access for traditional wildlife activities such as hunting and fishing, as well as trail-riding activities such as snowmobiling and all-terrain vehicle riding, than landowners managing for recreation or for nature conservation. Results also indicated that new landowners in the Northern Forest currently maintain the tradition of free public access to their lands.

Keywords: industrial private forest, private forest landowners, land tenure, landowner motivation, outdoor recreation, recreational access

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Table 1. Principal components factor analysis and reduction of many outdoor activities into broadly defined classifications of outdoor recreation activities.

Dimension	Factor loading	Landowners allowing activity (%)	Cronbach's alpha
Nonmotorized			0.95
Hiking	0.86	92	
Snowshoeing	0.81	95	
Wildlife viewing	0.85	93	
Bird watching	0.87	89	
Cross country skiing	0.80	92	
Traditional wildlife			0.89
Hunting	0.84	89	
Fishing	0.84	88	
Trapping	0.83	72	
Motorized and other trail riding			0.76
Snowmobiling	0.72	80	
ATV/OHV riding	0.47	42	
Mountain biking	0.59	57	
Horseback riding	0.58	53	
Boat and camping			0.77
Motor boating	0.63	41	
Canoe/kayak	0.72	66	
Camping	0.54	47	

Total number of respondents in the survey was 87 and 74 landowners indicated they permitted public access. ATV, all-terrain vehicle.

Table 2. Principal components factor analysis and reduction of many outcomes associated with allowing public access into broadly defined outcome dimensions.

ucts, agriculture, residence, recreation, nature protection, privacy, real estate investment, tax shelter, and others. Some landowners (n 10) gave equal priority to different land uses (e.g., timber/forest products and real estate investment both listed as "1"). Because our goal was to compare landowners with different land-use priorities, those 10 landowners who indicated equal priority to land-management priorities were excluded from the analyses. Figure 2 illustrates the 57 survey participants who listed a distinct first priority. One-way analyses of variance (ANOVA) with Tukey's honestly significant differences test for multiple comparisons was used to examine relationships between the three attitudes toward public access dimensions among landowner tenure groups and land-management priorities. Effect size (^{2}) was calculated to better understand the association between variables (Kyle et al. 2004). Chi-square analysis was used to examine relationships of outdoor activities permitted among landowner tenure groups as well as landowner management priority groups.

Survey Results and Analysis

Of 114 large landowner surveys, 87 were returned, yielding a 76% return rate of those whom we were able to contact and they agreed to participate in the study. Private landowners who returned their questionnaires were compared with those who did not return their mail questionnaires on acres owned and location of property in the Northern Forest region. The number of acres owned was not significantly different between respondents and nonrespondents. About one-half of the respondents (48%) and the nonrespondents (50%) owned between 1,000 and 5,000 ac, and the mean number of acres owned did not differ between the two groups (ANOVA, P 0.129). There were also no significant differences between respondents and nonrespondents within each state (χ^2 1.470; 3 df; P 0.689).

Most respondents from our study described their property as a large contiguous forest (76%); additional descriptions of their properties included agricultural area (11%) and other (13%). The total number of acres reportedly owned by the sample was 8,633,066. Parcel sizes among the sample ranged from 1,020 to 1,263,604 ac. Nearly one-half of them (49%) owned between 1,001 and 5,000 ac, although the mean property size was 99,230 ac. The 43 large landowners in the sample from Maine accounted for 8,216,650 ac, or 95%, of the total acreage in our survey. Additional acreage by state is as follows: 6 New Hampshire landowners accounted for 35,064 ac, New York's 18 landowners totaled 206,496 ac, and 20 large landowners in Vermont accounted for 174,856 ac. This is not necessarily reflective of the amount of land each state contributes to the Northern Forest. Rather, this reflects the heavier reliance on industrial forestry in Maine compared with the other three Northern Forest states.

The majority of large landowners (87%) allow public access and most of those who denied public access (13% and accounting for 159,517 ac) allow recreation but only for exclusive use by clubs, e.g., charging a fee for hunting. All the large landowners in Maine and Vermont reported that they permit public access and 5 of 6 large landowners in New Hampshire do as well. New York was the anomaly of the Northern Forest states with 11 of 18 landowners denying public access. Most large landowners in the Northern Forest (76%) did not charge

Figure 2. Number of survey respondents and distinct first priority land management.

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Tenure and Influence on Public Access

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Landowner Management Priorities and Influence on Public Access

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