



# Kentucky Woodland Owners: Who They Are and the Challenges They Face

by Billy Thomas

Kentucky has some of the most diverse woodlands in the United States with over one hundred tree species naturally occurring in the state. These woodlands support clean air and water, wildlife habitat, biodiversity, recreational opportunities, and much more. In addition, Kentucky's woodlands provide the foundation for a large forest industry with a significant economic contribution. Given the woodlands' tremendous importance, it is vital to support their health. To help develop programs and initiatives focused on woodland health, it is important to know and understand those who own them and the challenges they face. Using Kentucky data from the National Woodland Owners Survey and other sources this article seeks to provide a fuller understanding of Kentucky's family woodland owners, what they are doing with their properties, and the key challenges they face in order to facilitate support to them and the woodlands we all depend on.

## Ownership and Distribution of Kentucky's Woodlands

Based on the latest data collected by the U.S. Forest Service and the Kentucky Division of Forestry (KDF), more than 12 million acres of forestland (woodlands) occupy more than 48 percent of Kentucky. Unlike the Western United States, where much of the forestland is publicly owned, most of Kentucky's woodlands are privately owned. A quick glance at Figure 1 shows that the overwhelming majority (88%) of the woodlands in Kentucky are privately owned.

More than 73 percent of these privately owned woodlands are considered family

owned; this means that more than 8 million acres of woodlands in Kentucky are controlled by families. Kentucky's family woodland owners, like much of the general population, have a variety of backgrounds and interests. The recent National Woodland Owners Survey conducted by the U.S. Forest Service, provides the most comprehensive information we have available on Kentucky's family woodland owners who own 10 acres or more. There are 374,000 individual family woodland owners in Kentucky who make up 155,000 family woodland ownerships (Table 1 on page 4). The family ownerships are the focus of this article.

Figure 2 on page 4 shows the widespread distribution of woodlands across Kentucky; the forest green areas are family and privately owned forests, the hunter green areas are corporate owned forests, the orange areas are publicly owned forests, and the lightest green are considered not forested; however, these areas contain a significant number of small woodland ownerships.

## Ownership of Kentucky Woodlands

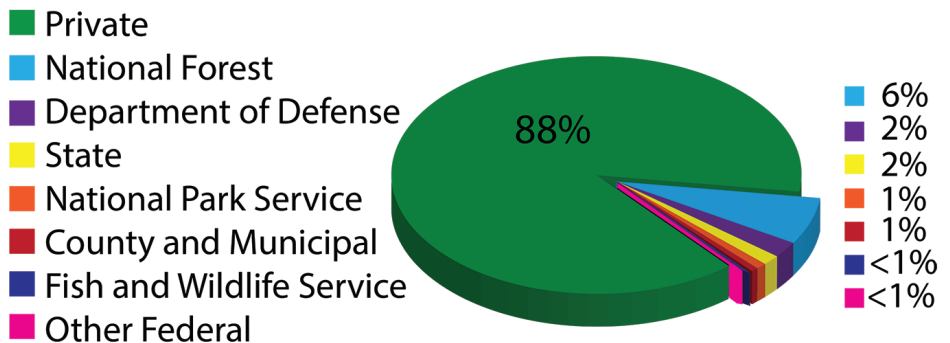
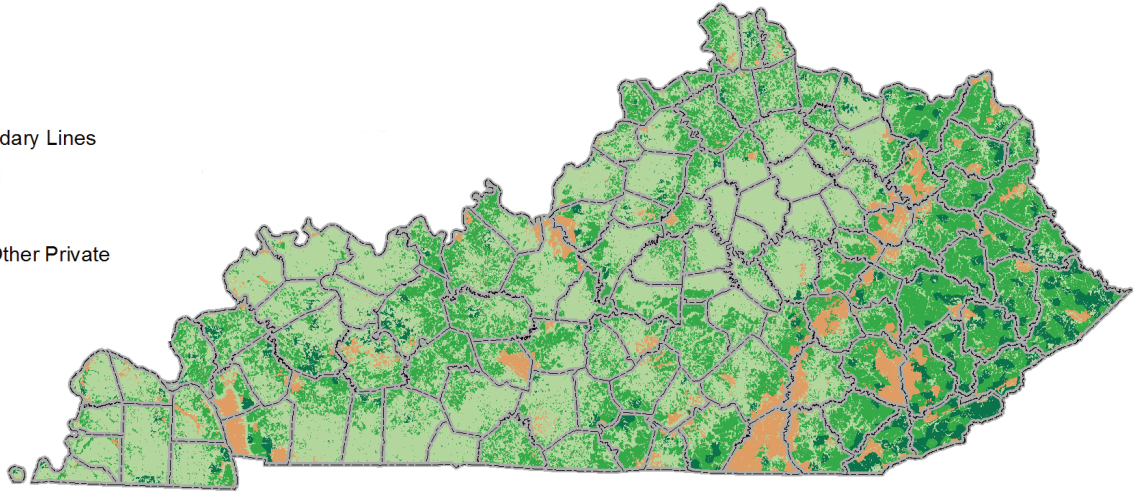


Figure 1. Ownership of Kentucky's woodlands. (Source: U.S. Forest Service)

**Legend**

- County Boundary Lines
- Not-Forested
- Public
- Family and Other Private
- Corporate



**Figure 2. Distribution of forestland by ownership in Kentucky.**

Source: Hewes, J.H., Butler, B.J., Liknes, G.C., Nelson, M.D., and Snyder, S.A. 2014. Public and private forest ownership in the conterminous United States: Distribution of six ownership types – geospatial database. USDA Forest Service, Northern Research Station: RDS-2014-0002.

**Kentucky’s Average Family Woodland Ownership**

This section explores key attributes of the average Kentucky family woodland ownership as estimated by the National Woodland Owners Survey. These statistics represent the 155,000 family woodland ownerships (10+ acres) in Kentucky. The same survey estimates that those owners with fewer than 10 acres own approximately 571,000 acres or just over 6 percent of all the family owned woodlands in Kentucky. While these smaller ownerships are important, the survey information from these owners was not included in this article.

Kentucky Family Ownership Types (10+ acres of woodlands)	% of Ownerships
Jointly Owned (i.e. wife and husband)	56.2
Individually Owned	30.6
Family Partnerships	10.9
Trusts or Estates	2.3

**Table 1. Family ownership distribution in Kentucky.**  
(Source: National Woodland Owners Survey)

**Average Family Woodland Size**

The average family woodland is 54.9 acres, but that statistic can be misleading. Over 46 percent of all family woodland acreage in Kentucky is owned by the 12 percent of family ownerships who own more than 100 acres. The average family woodland size would be smaller if we included those woodlands smaller than 10 acres. As shown in Table 2, the majority of family ownerships are 20 to 49 acres.

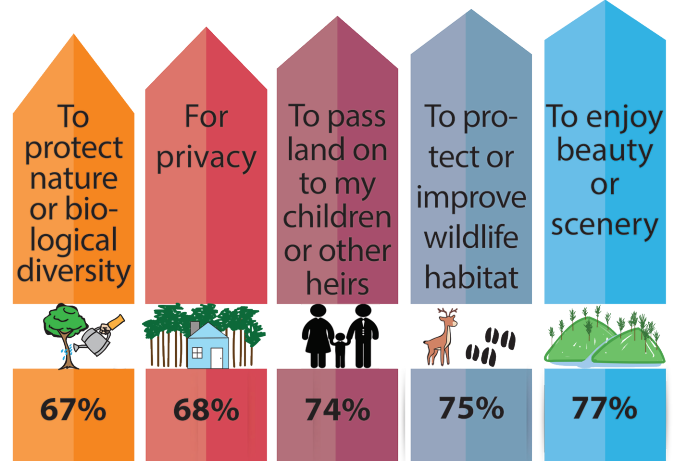
Family Woodland Ownership Acreage Size	% of Woodland Ownerships
10 – 19 acres	19
20 – 49 acres	47
50 – 99 acres	22
100+ acres	12

**Table 2. Distribution of family woodland ownerships based on parcel size.**  
(Source: National Woodland Owners Survey)

**Average Kentucky Woodland Owner Age, Land Acquisition, and Ownership Tenure**

Individual owners and secondary owners for jointly owned properties were asked their age as part of the National Woodland Owners Survey. There is a modest gap in the ages of the primary owners (individual owners and primary owners of jointly owned woodlands) and secondary owners. The average age of Kentucky’s primary owners is 62 while the average age of the secondary owner is 54. Over 75 percent of woodland ownerships acquired their woodland through a direct purchase, and on average they have owned the woodland for more than 23 years. As many of these woodland owners approach retirement, the urgency of transferring the woodland to the next generation increases. The issue of intergenerational transfer of the woodland is a key challenge facing woodland owners.

**Top 5 Reasons Kentucky Family Woodland Owners (10+ acres) Own Their Woodlands**



Source: National Woodland Owners Survey

**Primary Residence or Absentee Ownership**

The survey indicated that nearly 35 percent of the family woodland ownerships lived greater than 1 mile from their woodland. These absentee owners account for almost 38 percent of all family woodlands in Kentucky.

Previous research indicates that a high percentage of these absentee woodland owners live in the three largest population centers—Lexington, Louisville, and Northern Kentucky. Absentee woodland ownerships face extra challenges compared to woodland owners living on the property. For example, absentee owners are more at risk for trespass, including timber trespass, and increased travel time and costs to visit, enjoy, and work in their woodlands. Absentee woodland owners are encouraged to cultivate relationships with neighbors, as they can help keep an eye on your woodland when you are not there.

National Woodland Owners Survey asked respondents several questions regarding ongoing woodland activities or those they plan to participate in.

### Recent and Planned Activities

In the last five years, over 46 percent of Kentucky’s family woodland ownerships (10+ acres) have “cut and/or removed trees for sale or own use.” Nearly one third of family woodland ownerships indicated they had done some “road or trail construction or maintenance.” Invasive plants and wildfire are two problems, among many, faced by many woodland owners in Kentucky. Only 16.2 percent of the owners had “eliminated or reduced invasive plants” and 7.7 percent had “reduced fire hazard” in their woodlands. While these percentages are relatively low, there is reason for optimism that more work will be done. Higher percentages of family woodland owners indicated they planned to address these threats in the next five years, 25.4 and 10.6 percent respectively.

### Non-Timber Forest Products

Timber is not the only valuable product that woodlands produce. The tremendous biodiversity found in Kentucky woodlands supports numerous plants, other than trees, that can be valuable as well. Most people recognize that ginseng is a non-timber forest product but there are many more plants in Kentucky woodlands that have value for personal consumption or for sale. Just over 29 percent of woodland ownerships indicated they had collected edible plants for personal use. Medicinal plants were collected by 2.9 percent of the ownerships for personal use and 4.5 percent collected them for sale. Decorative and landscaping materials also were collected by 10.7 and 5.5 percent of the ownerships, respectively. There are several benefits to using non-timber forest products, such as reducing food and craft expenses, providing supplemental income, and facilitating a closer connection to the woodland.

### Timber Harvesting

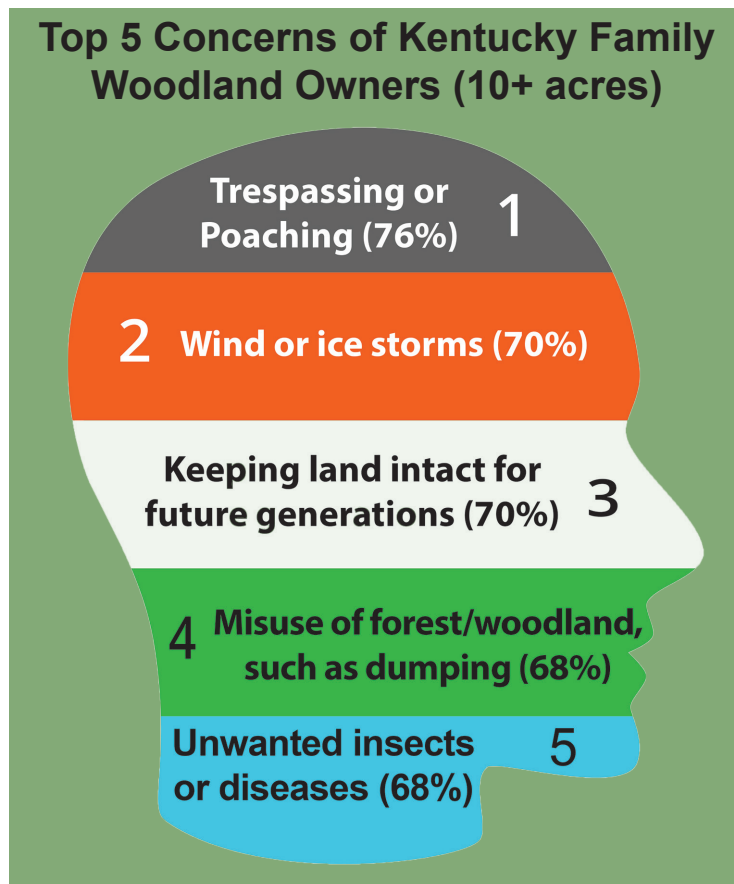
Only 24.5 percent of the ownerships indicated they owned their woodland for timber products. However, more than 54 percent of the ownerships had logs cut or removed for personal, commercial, or other reasons. This means that while timber harvesting may not be the main or even one of the top reasons woodland owners own their land, it is a frequent activity. In fact, most of Kentucky’s woodlands have been harvested at least once and many



*Timber harvesting is not the main reason most woodland owners own their property; however, more than half have harvested timber.*

*Photo courtesy: Billy Thomas*

## Top 5 Concerns of Kentucky Family Woodland Owners (10+ acres)



### Farmers are Woodland Owners, Too

Many of Kentucky’s farms also contain woodlands. According to the 2012 USDA Census of Agriculture, there were 77,064 farms in Kentucky and 59 percent of them included woodlands. There are 2.7 million acres of woodlands on farms - 20 percent of all private woodlands in Kentucky. Of those farms with woodlands, over 27 percent of them treat at least part of their woodlands as pasture. Similarly, on the National Woodland Owners Survey, livestock grazing was reported on over 31 percent of all woodlands. While some of these farm woodlands are being sustainably managed, there are likely many opportunities to improve these woodlands through active management practices to increase the health and productivity of Kentucky’s farm woodlands.

### Woodland Owner Activities

There are numerous ways that woodland owners are engaged with their land. Some woodland owners are very active while others rarely visit or engage in active management. The

of them multiple times. Less than 16 percent of the timber harvests on family woodlands involved a professional forester. This means there was a high probability that many of the harvests were driven solely by local markets without technical considerations needed to address long-term sustainability. Woodland owners are strongly encouraged to plan well in advance of a timber harvest and to seek professional assistance in ensuring the long-term sustainability of their woodland.

### Management Planning

One indicator of sustainable woodland management is a written woodland management plan. In Kentucky, 6.5 percent of all ownerships have a written woodland management plan. Of those with a written woodland management plan, a high percentage (81.7) had implemented practices included in the plan. Respondents also were asked to identify who wrote their woodland management plan. KDF provided the majority of the assistance, developing 82.9 percent of the family woodland plans. Forest industry foresters wrote 11.7 percent of the plans and private consulting foresters wrote 1.1 percent of the plans.

### Key Challenges Kentucky Woodland Owners Face

Unlike the pines that cover much of the Southern United States, Kentucky's woodlands are dominated by deciduous long-lived hardwood tree species. Kentucky's woodlands produce some of the most desirable hardwood in the world, but it does take longer for hardwood trees to grow compared to the faster growing southern pines. Of the more than 100 native tree species in Kentucky, more than half of them have commercial markets that furnish much of the interiors of homes and buildings. Not only do Kentucky's woodland owners face longer rotations, they also face a number of other key challenges that threaten their ability to sustainably manage their woodlands. There are three key challenges worth exploring: neglect and emerging threats, the intergenerational transfer of woodlands, and the declining availability of technical assistance to Kentucky's woodland owners.

### Neglect and Emerging Threats

For many years, there were few problems with just leaving the woods alone and letting them grow. In today's era of globalization and a changing climate that is no longer the case. Abandoned or neglected woodlands are subject to an ever-growing number of threats, including invasive plants and insects that can quickly spread if unchecked and take over a woodland. Indeed, the problem has become so bad in Central Kentucky that addressing and controlling the invasive bush honeysuckle is one of the first practices that foresters are forced to recommend before anything else can be done in the woodland. Thirty or forty years ago, this invasive plant was mostly restricted to horticultural and wildlife plantings and rarely reported in woodlands. Not too long after bush honeysuckle began spreading into Kentucky woodlands, another threat was introduced: The

invasive emerald ash borer (an insect from Asia that attacks ash trees) was accidentally introduced into Michigan in 2002. It has now spread as far south as Alabama and as far west as Oklahoma, leaving millions of dead ash trees in its wake. These are just two recent examples of the need for greater monitoring and protection of woodlands today as compared to the past.

### Intergenerational Transfer of the Woodland

Recall, that the average age of Kentucky's primary woodland owners is 62. That means the average Kentucky woodland owner is (or should be) preparing for retirement.

As part of the planning, many woodland owners can find it challenging to effectively plan for the transfer of the woodland to their heirs. A



*Cliff Taylor, 4th from left, is a Central Kentucky woodland owner who is planning a smooth intergenerational transfer of his woodland to his heirs.*

closer look at the National Woodland Owner Survey paints a clearer picture of just how much woodland will be transferring to new ownerships, whether that transfer occurs within the family or not. Over 41 percent of all woodland ownerships have primary owners that are 65+ years of age. Further, these "retired" woodland owners control over 43% of all the family owned woodlands in Kentucky. While they may not have all the answers on how to best do it, over 70 percent indicated that they wanted to keep the land intact for future generations. Woodland owners interested in passing their land to their heirs are advised to seek professional assistance from an estate planning team (a great place to learn more about estate planning is to visit <http://fcs-hes.ca.uky.edu/publications-list/12> and then scroll down to the "Estate Planning" section). Based on experience in assisting woodland owners with intergeneration transfer, it is important for current woodland owners to engage their daughters or sons



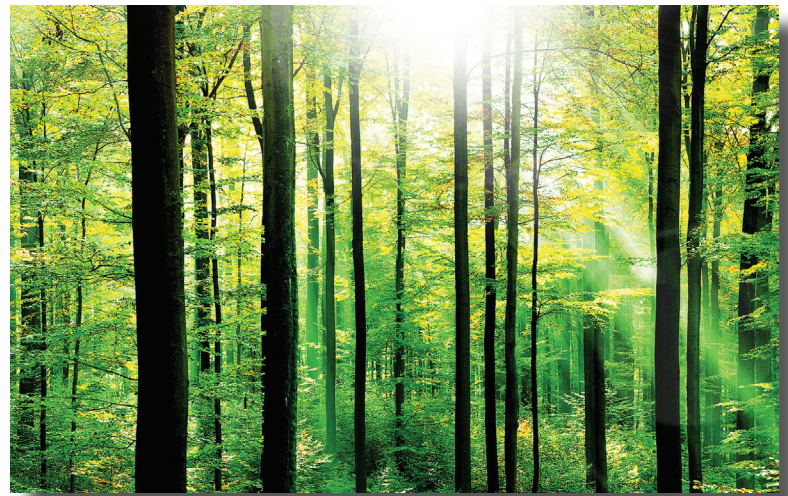
*Bush honeysuckle is just one of the threats facing woodlands.*

*Photo courtesy: Chris Evans, University of Illinois, Bugwood.org*

in the management of the woodland. This involvement helps to ensure that long-term objectives are established and the heirs are prepared to receive and manage the woodland at the appropriate time. Unfortunately, this is not always the case which means the long-term sustainability of that woodland is rarely assured.

### Limited Technical Assistance Available

Another key challenge facing Kentucky woodland owners is the limited and shrinking amount of technical assistance available to help them sustainably manage their woodlands for optimal health and productivity. A number of agencies and organizations provide information, education, and resources to aid family woodland owners (i.e. Extension at the University of Kentucky). KDF is the lead agency in assisting woodland owners to sustainably manage their woodlands. Unfortunately, their capacity to do so has been seriously eroded over the last 10 years (see Figure 3). Since 2006, the KDF has lost nearly 45 percent of its employees as a result of a series of budget cuts. Not surprisingly, this significant reduction has had a direct impact on the amount and frequency of support they can provide to Kentucky's woodland owners. In some areas of the state, it can take more than a year for a woodland owner to have a woodland management plan prepared by a KDF service forester. KDF has 33 percent fewer service foresters than they did 10 years ago.



*Kentucky's woodlands are mostly owned by families. These family and their woodlands provide multiple benefits to our state and they need support to address numerous challenges.*

### Closing Thoughts

Kentucky's woodlands are a valuable resource worthy of support. These woodlands provide countless ecosystem services and support a major economic engine for the Commonwealth, including more than 27,700 direct jobs and a more than \$14 billion total economic contribution in 2016. For the purposes of comparison, the Kentucky coal industry directly employed 6,261 people during the first quarter of 2017 and had a total economic contribution of \$3.9 billion in 2015. Unlike coal, woodlands are a renewable resource that can be managed in perpetuity.

Given the significant, and often overlooked, importance of woodlands to Kentucky, it is critical all woodland owners, Kentucky's citizens, and elected officials support healthy and productive woodlands. Because much of Kentucky's woodlands are owned by family ownerships, working to support them is essential. It is important for those concerned about our woodlands and particularly those engaged in good woodland management to enlighten all woodland owners about opportunities for assistance. Further, it also is important to let elected state and federal legislators know that family woodlands and their sustainable management is important to their constituents and vital to Kentucky's future.

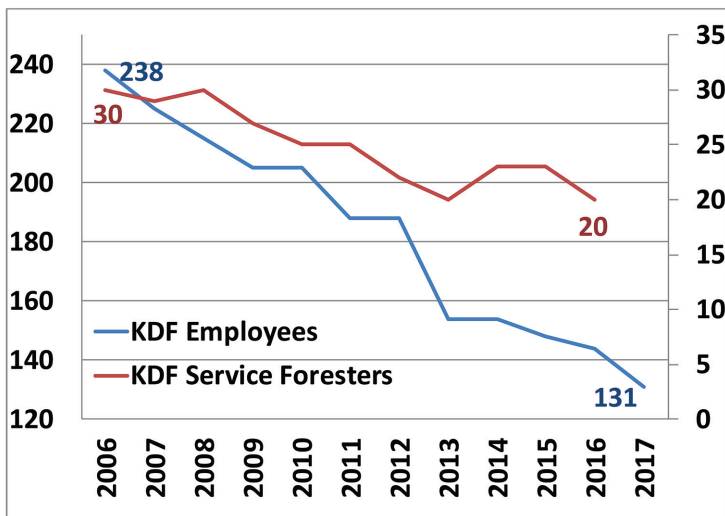


Figure 3. Number of Kentucky Division of Forestry employees from 2006 to 2017.

KDF is not the only provider of technical forestry assistance to Kentucky woodland owners. There are three other groups that provide direct assistance: consulting foresters with the Kentucky Association of Consulting Foresters, technical service providers with the Natural Resources Conservation Service, and industry foresters. In Kentucky, there are 21 consulting foresters, fewer than 10 technical service providers (most of whom are also consulting foresters), and a limited number of industrial foresters that work for sawmills to help supplement the 20 KDF service foresters. The need and demand for technical assistance far exceeds the supply, which is a serious threat to healthy and productive woodlands in Kentucky.

### References:

- <https://www.fia.fs.fed.us/nwos/>
- <http://forestry.ca.uky.edu/economic-report>
- <http://energy.ky.gov/Pages/CoalFacts.aspx>
- <http://www.kentuckycoal.com/ky-coal-facts/>

### About the Author:

**Billy Thomas**, Extension Associate with the University of Kentucky Department of Forestry works primarily on non-industrial private forest issues and is the associate editor for the Kentucky Woodlands Magazine.

Cooperative Extension Service, Department of Forestry, University of Kentucky, 213 Thomas Poe Cooper Building, Lexington, KY 40546; E-mail: [billy.thomas@uky.edu](mailto:billy.thomas@uky.edu); Phone: 859.257.9153; Fax: 859.323.1031.