Timber theft and trespass are important issues to all woodland owners. It is important for those who need to protect their woodlands from theft and trespass, and it is also important for those conducting operations such as a timber harvest or a hunt lease to ensure that loggers and hunters stay on the property. There are some basic practices that can be done to help in both situations. This article provides information on the difference between timber theft and timber trespass and how they occur as well as conditions that contribute to unauthorized cutting and how to reduce risk. While it is impossible to reduce all risks associated with woodland ownership, having a good understanding of timber trespass and theft issues can help woodland owners develop plans to minimize problems.

Defining Timber Trespass and Theft
Unauthorized cutting of timber occurs either intentionally (timber theft) or unintentionally (timber trespass). Timber theft occurs when a boundary line is knowingly crossed to steal timber. This can occur on a large scale, covering acres where all valuable trees are cut, or on a limited scale, where only a few trees near a boundary line are removed. Timber trespass, on the other hand, typically occurs through one of two circumstances. The first is when boundaries are not marked and/or are unclear, leading to an unintentional cutting. The second is when the boundary is misrepresented or unknown by the landowner or their representative leading to unintentional cutting of adjacent timber by the logger. The key point is that unauthorized cutting of trees can result from both unintentional and intentional actions of landowners and loggers.

This article was based on the report “2016 Report on Timber Theft and Trespass in Kentucky” authored by Extension faculty J. Stringer, and Extension associates C. Niman, and B. Thomas of the University of Kentucky, Department of Forestry. Data used in the report and this article were generated in part from a survey of members of the Kentucky Association of Consulting Foresters (www.kacf.org) conducted by the authors. The authors thank the consultants who participated in this survey.
Occurrence in Kentucky

Because there is no formal reporting mechanism for timber theft or trespass, determining detailed information on the distribution and magnitude of these problems is difficult. However, case data from Kentucky’s consulting foresters provides information on the relative distribution of unauthorized harvesting in Kentucky (Figure 1). The figure clearly shows that unauthorized cutting has the potential to occur throughout Kentucky with several Eastern counties subject to a higher frequency of unauthorized cutting. The higher incidence of unauthorized harvesting reported by consulting foresters is consistent with anecdotal reports.

There is also a relationship between geographical area and the size of an individual case of unauthorized harvest. For the entire state, the average number of trees involved in an individual case was 74 on 11 acres (Table 1). This involved a total of 13,939 board feet of timber, roughly one truckload, with a fair market stumpage value of $4,909. Stumpage is typically the value received by landowners when they sell timber. It’s generally 30 percent to 50 percent of the delivered mill price for logs, with the balance reflecting timber harvesting costs and logger profit. Table 1 also indicates that there is a wide range associated with unauthorized harvests, from 1 to 5,000 trees and up to 250 acres. As indicated above timber losses vary by region. Figure 2 provides information on the average case of unauthorized harvesting across Kentucky. The highest loss occurs in Eastern Kentucky with the average unauthorized cut occurring on 31 acres with 143 trees harvested. These 143 trees yielded 30,167 board feet of timber with a stumpage value of $7,875, equivalent to a loss of $256 per acre. Central and Western Kentucky experienced less acreage, trees, and value per case with Western Kentucky having the smallest dollar loss, $2,515 per case.

Kentucky’s timber trespass law (KRS 364.130) indicates a potential compensation of three times the stumpage value and damages. Three times the stumpage associated with timber. Figure 2 indicates that landowners on average in Eastern Kentucky could receive $23,625 dollars per case just for timber damages, compared to approximately $7,500 in Western Kentucky due to the greater size (# of trees) of unauthorized harvest occurring in the eastern third of Kentucky. The values above are regional averages and there are cases that greatly exceed the average. Further, damages other than timber including professional fees can increase the total value of each case.

While immediate stumpage value loss is one of the most significant damages for landowners experiencing an unauthorized harvest, there are others. Poor logging practices can lead to bark damage on trees resulting in wood rot and future timber loss, soil compaction and erosion, and logging debris not disposed of properly all of which are damages.

How Unauthorized Cutting Occurs

One of the pre-eminent questions that arise in discussions over unauthorized harvesting is, whose fault is it? Many might immediately indicate that it is the loggers’ fault. However, survey information from consulting foresters directly involved in investigating unauthorized harvest cases indicates this may not necessarily be the case. This information indicated that unauthorized harvesting could be classified into one of four types (Table 2). Two of the types representing 62 percent of the cases occurred because boundaries were not clear or the boundary was misrepresented to the buyer of the timber or the logger. The cause of these cases can vary and include overlapping surveys or deeds that are contradictory, boundaries that have been incorrectly marked, or an unmarked boundary that is difficult to follow. The remaining 38 percent are clearly timber theft with intent to

Table 1. Number of trees and acres of individual cases of unauthorized harvest.

<table>
<thead>
<tr>
<th></th>
<th>Average</th>
<th>Low</th>
<th>High</th>
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</thead>
<tbody>
<tr>
<td>Number of trees per case</td>
<td>74</td>
<td>1</td>
<td>5,000</td>
</tr>
<tr>
<td>Acres per case</td>
<td>11</td>
<td>0.01</td>
<td>250</td>
</tr>
<tr>
<td>Board feet</td>
<td>13,939</td>
<td>150</td>
<td>316,727</td>
</tr>
<tr>
<td>Value of stumpage</td>
<td>$4,904</td>
<td>$1,300</td>
<td>$111,568</td>
</tr>
</tbody>
</table>

Source: Results based on a survey of Kentucky Association of Consulting Foresters on timber theft case activity in the last five years. (2015-2010)
steal, nine percent being the most blatant where a logger sets up to specifically steal an entire tract of timber. This shows that there can be a number of reasons for unauthorized harvesting, and both landowners and loggers can be at fault.

**Magnitude of Unauthorized Harvest**

Another issue associated with this problem is determining how significant unauthorized harvesting is, as it relates to the entire timber supply. While the latter is not necessarily an important question for an individual whose timber has been cut without authorization, it is an important question from an industry and trade standpoint. Anecdotal information varies widely depending on the source of the information. Fortunately, some information has been generated from a portion of Kentucky, specifically far Eastern Kentucky, where research indicates that 0.35 percent of the total timber volume cut each year comes from unauthorized harvesting. This same analysis indicates similar results for counties in surround states, including 0.86 for Tennessee, 0.63 for Virginia, and 0.17 for West Virginia. Regardless, while the percent of stolen timber in the overall timber supply is low, the impact of unauthorized cutting for the landowners (particularly in the egregious cases) can be significant.

**Damages and Compensation**

Collecting evidence and successfully prosecuting felony timber theft has proven difficult in Kentucky and the majority of timber theft cases are settled either out of court or in civil court. As a result, landowners are in adverse positions; they must seek compensation through their own means, including paying for expert witnesses (ex. surveyors, foresters) and legal fees. The relatively low average stumpage value associated with many cases of unauthorized harvesting indicates that landowners may not find it palatable to pursue compensation. With larger cases of theft or trespass, the monetary loss can be significant, warranting pursuit of compensation. In cases of unauthorized harvesting where the outcome is known, 58 percent were settled outside of court and only a little over 18 percent were settled in court or through arbitration. However, in these cases it is not guaranteed that the victim of timber theft will recover the total compensation outlined in Kentucky’s timber trespass law (KRS 364.130). This could be up to three times the stumpage value plus other damages, including the stumpage value of the timber removed and fees for professional services if needed, typically consulting forester and surveying fees, and potentially fees for legal representation. Based on survey data from consulting foresters, Table 3 shows that triple damages were paid most often (48.9%) as stipulated in KRS 364.190, followed by single damages (31.9%) and double damages (17%).

As stipulated in KRS 364.130, the landowner is also entitled to recovery of legal costs incurred as a result of the trespass. Forty-five percent of the time the trespasser paid the rightful owners legal fees, 32 percent of the time partial payment was made and 23 percent of the time the legal fees were unpaid. This variation can be expected given that

<table>
<thead>
<tr>
<th>Occurrence type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property line unknown or disputed</td>
<td>41</td>
</tr>
<tr>
<td>Landowner misrepresents boundary</td>
<td>21</td>
</tr>
<tr>
<td>Logger intentionally crosses boundary</td>
<td>29</td>
</tr>
<tr>
<td>Logger harvests entire absentee landowner property</td>
<td>9</td>
</tr>
</tbody>
</table>

| Trespasser Paid Single Damages | 31.9% |
| Trespasser Paid Double Damages | 17.0% |
| Trespasser Paid Triple Damages | 48.9% |
| Trespasser Paid More Than Triple Damages | 0.02% |
the majority of cases are settled out of court and given the high degree of variability and fault associated with unauthorized cutting.

Research data from U.S. Forest Service surveys of Kentucky woodland owners indicates that for many, the primary reason for woodland ownership is not timber. Recreation, aesthetics, and wildlife are weighted more heavily than timber, indicating that there are both tangible and intangible losses associated with unauthorized harvesting, particularly in cases of significant timber theft, that need to be considered when discussing this issue. Victims of unauthorized cutting represent credible sources of information on these factors (ex. www.timbertheft.org), which we fully recognize should be considered in deliberations on this issue, but are not documented in this report.

Reducing Risk for Woodland Owners

The following information should prove useful to woodland owners who want to help protect their property from unauthorized cutting. To help decrease the risk of unauthorized harvesting one or more of the following should be considered.

1. Thoroughly mark and sign property boundaries. This requires that accurate survey or boundary delineation is available. The marking does two things: It makes it difficult for someone to claim they did not know where the boundary was and it indicates that you are an interested and involved woodland owner who cares about their property.

2. Maintain good property records, deeds, maps, surveys, and other information that can provide anyone interested a clear definition of your harvest boundary.

3. Be vigilant to what is occurring around your woodlands. If a timber harvest is occurring on an adjacent property, it would be prudent to contact the adjacent landowner or logger to let them know where your boundary is and how it is marked. Absentee owners face special challenges with this issue and having local assistance is important. Notification instructions should be given to those watching the property to alert you and local law enforcement of an ongoing or a potential issue.

4. If you receive a letter indicating a timber harvest is going to occur on an adjacent property, you need to respond immediately. The timber trespass law has a provision that adjacent landowners are to be notified via certified letter seven days in advance of a harvest on an adjacent property. As an adjacent property owner, you have seven days to offer an objection to the proposed boundary of the harvest if you have one. If you do not respond and an unauthorized harvest occurs then you may only be entitled to the stumpage value and damages. If you object and there is a problem, you can sue using the timber trespass law for three times the stumpage value and damages.

For those who are contemplating a timber harvest or other operations, steps should be taken to help reduce the risk of those operating on your property from straying over the boundary.

5. Use a timber sale agreement or contract that contains information on property line delineation (attach deeds, maps, boundary descriptions, etc.).

6. Ensure that boundaries are marked toward the inside of your boundary. If marks or signage are only placed facing the outside, loggers or others may easily stray over the boundary only to realize the situation after they have trespassed.

7. Use flagging to delineate harvest boundaries. If a timber harvest runs up against your boundary line, this will enhance boundary identification, especially paint that may have faded or signs facing away from the prop-
There are loggers who flag boundaries to ensure that they do not wander. However, it is the landowner’s responsibility to know where the boundaries are and properly convey them to loggers or timber buyers.

8. If you are unsure of your boundary, it is good to mark a harvest shy of where you think the boundary is, thus providing a buffer to help avoid trespass.

9. Use a walk through with a logger or others operating on your property to ensure they understand boundary delineation, and check boundaries during operations where feasible and safe.

It is possible to help reduce the risk of an unauthorized harvest; however, due diligence is required. Foresters, particularly consulting foresters, can assist with timber harvesting. They can also help those who have had an unauthorized harvest of trees. You can find a list of Kentucky consultants meeting the Association of Consulting Forester standards at www.kacf.org. Consulting foresters provide assistance in all aspects of timber sales including delineating boundaries and work as your advocate in dealing with timber sale issues including trespass or theft. Industry foresters can also provide assistance. In many instances, particularly if they have purchased the timber, it is in their best interest to ensure that the logger they are contracting with to harvest the timber does not trespass. Kentucky Division of Forestry foresters, while unable to assist directly with timber sales, can help advise on where to seek assistance. In summary, understanding how timber trespass and theft occurs, engaging in active management and observation of your property, and following some simple steps to help reduce trespass issues can help reduce the risk of unauthorized cutting.

Sources of Information

2016 Report on Timber Theft and Trespass in Kentucky. Informational Report, University of Kentucky, Department of Forestry. www.ukforestry.org


Timber Trespass in Kentucky. Kentucky Woodlands Magazine 3(1). www.ukforestry.org

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July 30
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August 13
West WOSC - UK Princeton Research Center in Caldwell County