

# Steps for Assessing Storm-Damaged Timber for Salvage Operations

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# Introduction

Severe storms leave lasting impacts on timberland, with landowners often facing the daunting task of recovering both financial value and forest productivity. Damaged timber deteriorates rapidly due to exposure to fungi, insects, and weather, requiring prompt and well-organized action. The challenges extend beyond physical recovery, involving financial and technical decisions critical to preserving value and preparing the land for future growth. This guide offers practical steps to assess damage for subsequent salvage operations, empowering landowners to act decisively in the aftermath of a storm.

The question is if the damage is severe enough to warrant starting over, doing some remedial work, or if the damage is light, maybe nothing at all. If damage is minimal or total, then paying for a professional's judgment could be unnecessary. Furthermore, securing a professional visit to the property immediately after a Hurricane can be challenging, especially if the landowner's sole request is a diagnosis. Consultants have limited time and resources and, like any businessperson, are motivated by profit.

Suppose the landowner does not have a prior relationship with the consultant. In that case, they should consider offering to let a consultant manage the property (particularly timber sales) going forward if they want to secure their services. In the instance a landowner does not have a personal relationship with a professional forester, they should be aware that each state has a detailed database of Registered/Certified Foresters.

For instance, in Arkansas a landowner could visit <https://agriculture.arkansas.gov/board-of-registration-for-foresters/find-a-forester/> and search for registered foresters in and around their area.

Alternatively, a landowner can contact the state university extension service or their state forestry commission. Typically, these would be services rendered free of charge, but the tradeoff is you will likely be placed, "in the queue," meaning you will receive assistance in the order in which your request was made. A Consulting Forester would have a more thorough report to give a landowner due to the fact they are paying for the service. Extension and the Forestry Commissions are state agencies and can only educate and make recommendations based on observations rather than conducting an inventory.

In either event, the landowner should contact their state forestry agency (or extension service) for websites where these contacts can be found (Also forestry associations may be able to provide guidance on where to find experts). If you are planning to contact a consultant and don't already have a pre-existing relationship, the best time to get in touch with them is the day the storm hits, if not then, the next day. There will be a huge surge in the demand for their services. Act quickly.

Once the landowner has decided on the resources to employ to survey damage, the next step is documentation. What follows is a step by step process for assessing and measuring damaged and undamaged timber on the property without professional assistance. The steps do not require any specialized forestry equipment but if you plan to ultimately file a casualty loss claim, then we strongly recommend securing a professional forester to conduct a more thorough estimate.

# A word of Caution

While surveying the property, remember dangerous conditions will exist in the wake of the storm. Of particular importance is that downed or even some standing trees may be under tension and could be dangerous if they release and people are in the path of the log or tree. Landowners should only enter damaged areas when conditions allow. Roads and access routes should be checked for hazards like fallen trees and unstable infrastructure. Anyone going into the forest in the affected area should be especially careful. Wear clothing and footwear appropriate for woods work. Have personal protective equipment- at minimum a safety vest (so others can see you, or at worst, find you), a hard hat, eye wear, ear protection, safety footwear (steel toed boots ideally, but the heaviest footwear you own)- on hand even if just surveying damage in the woods. Brush/snake guards for your legs, while not necessarily required, are a highly recommended additional item to have on hand.

Cutting timber will require additional safety equipment, such as chaps and a face shield, among others. The storm would have left a lot of branches twigs and other debris hanging in tree tops that may fall at any time. Look up as well as ahead. Lodged limbs and trees may be falling for months,

watch where you step. Areas that were flooded, either by the storm surge or run-off are likely to have displaced, and distressed, wildlife. Wear a good insect repellent. The storm left a lot of stagnant water, excellent breeding places for mosquitoes. The ticks will be hungry. West Nile Virus, Lyme Disease and a variety of other insect borne diseases are likely to flourish.

Lastly, In most/all states, it is unlawful for someone who is NOT a registered forester to conduct and utilize an inventory of timberland for marketing purposes. These grievances will be taken up with the State Board of Registration of Foresters and potentially up to the Society of American Foresters. Therefore, landowners need to understand that their property assessment is only valid in their own evaluations and does not warrant specific pricing, contractual agreements, etc.

## Step 1. Documentation

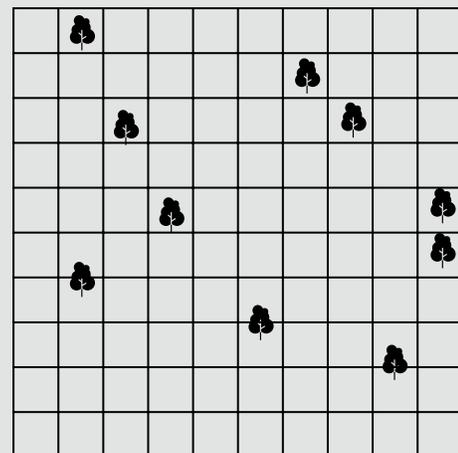
Use maps, aerial photos, and GPS technology to help identify and record damaged areas. Photographs and detailed notes further support insurance claims, tax filings if claiming a casualty and other financial decisions. Walk all the boundaries throughout the stands (if you can do so safely) and note on the photo or map the locations of the major pockets and types of damage. The following steps could be used as a guide if you would like to attempt this task yourself. Remember for tax purposes, the IRS is much more likely to challenge your estimate if you do this yourself. Professional foresters are more likely to not face as great a level of scrutiny for reported damages.

Do note the extent of tree damage, its location, and average tree diameter might influence your salvage decisions. You will need to tally the trees that remain undamaged as well as those that are damaged, being sure to record their severity. To estimate acreage damage, use maps, photos, GPS, or another method. The local Tax Assessor or Farm Service Agency may be helpful in determining acreage. To determine timber value per acre requires a cruise, using a similar tally system to Figure 1.

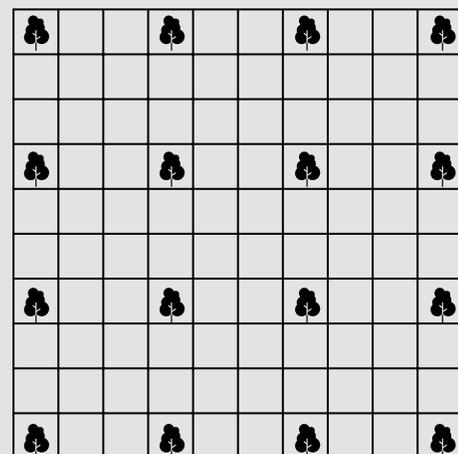
## Step 2. Develop a Sampling Plan

- **Define the area:** Use publicly available maps, satellite imagery (e.g., Google Earth), or local GIS data to outline the affected area.

- **Divide into plots:** Divide the area into a grid or use natural boundaries. Plots of 0.1 acre (1/10th acre) are a practical size for manual measurement. A circular 1/10th acre plot would have a radius of 37.2 feet. For a rectangular plot, the area is 50 feet x 87.1 feet. Use your flagging tape to mark this. Use your flagging tape (or some other marking to mark boundaries for the plots.



Random Sampling



Systematic Sampling

Figure 1. Sampling design examples

## Standard Plot Sizes and Densities

- **1/10-acre plot** (0.1 acre) sampled per acre is common in timber surveys.
- You can use fewer plots per acre (1 plot per every 2–5 acres), but this provides less precision. Alternatively, if you want more precision or you have a very heterogeneous forest (meaning species clumps, or very differential damage across your property), multiple plots to increase precision (2–5 plots per acre).
- Space plots at regular intervals, in a grid pattern across the survey area.

1/10 acre is equal to 4,356 square feet. Using this convention allows you to scale up your measurements to represent 1 acre of land by multiplying by 10. If your forest or study site has 100 acres, a 1/10-acre plot represents 0.1% of the total area. If you take multiple 1/10 acre plots across the site, they together form a statistically representative sample of the larger area. Measurements taken in the 1/10-acre plot (e.g., tree count, diameter, height, basal area, or biomass) can be extrapolated to estimate values per acre. For example, if you count 20 trees in the 1/10-acre plot, it represents 200 trees per acre.

## Plot Placement

- **Systematic Sampling:** Space plots at regular intervals, such as every 200 feet, in a grid pattern across the survey area.
- **Random Sampling:** Use GPS or random number generation to choose plot locations.

## Common Sampling Intensities

- Under normal conditions, one plot will represent from **1 acres of your forest**. This sampling intensity is sufficient to estimate forest conditions unless the forest is highly variable.
- If you are trying to determine if you should bother with a logging operator or consultant, this number should suffice to make that determination. If your plots are uniform in terms of damage and standing trees, then 1 plot for a first estimate should be fine.
- **For larger tracts of land** (e.g., 50+ acres), you might have fewer plots per acre. The below information is used to sample **5–10% of the total area** by placing plots systematically or randomly

# Measure Damaged Downed Trees

Sometimes storms leave a lot of downed trees and big branches on the ground. These might be scattered or in piles. Measuring them the same way you measure standing trees doesn't work well. That's where the "line transect" method comes in.

## How it works:

- Pick a spot at the edge of the damaged area.
- Choose a random direction with a compass (or phone app) and walk straight in that direction, laying out a tape measure or rope (this is your "transect line").

- As you walk, look for any downed tree or branch that the line crosses. When it does, measure the diameter (thickness) right where the line touches it.
- Keep going until you've measured the full length of the line.
- Do at least three different lines per plot for better accuracy.

### Why this works:

The more big pieces you cross, the more downed wood there is in that area. By measuring diameters along a known length, you can estimate how much wood is on the ground without having to measure every piece.

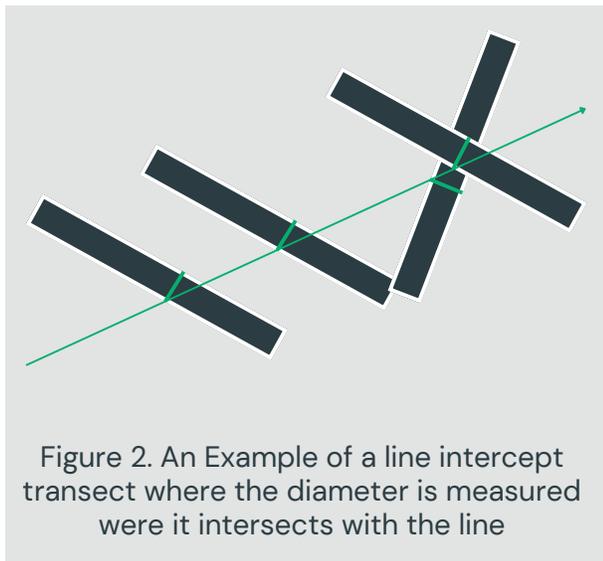


Figure 2. An Example of a line intercept transect where the diameter is measured where it intersects with the line

Simple version of the line transect tons formula.

Tons  $\approx 1.57 * \text{Sum of squared diameters (inches)} / \text{Transect length (feet)}$ .

You'll notice the  $\approx$  this is to account for the 1.57, which is a constant derived from the line-intersect method — it's not an exact geometric formula for every situation, but an empirical factor that works for average wood shapes and orientations.

### Where:

- Sum of squared diameters = add up (diameter $\times$ diameter) for each piece touching your line
- Transect length = total feet of line you measured
- 1.57 = unit conversion constant (from the forestry line-intersect method)
- 79 = cubic feet per ton for pine (use the right value for your species)

### Example (pine):

Diameters: 6, 8, 4, 10, 7 inches along a 50-foot transect

1. Square each: 36, 64, 16, 100, 49
2. Add:  $36+64+16+100+49=265$   $36 + 64 + 16 + 100 + 49 = 265$
3. Volume (cubic feet) =  $1.57 \times (265/50) \approx 8.3$  ft<sup>3</sup>
4. Tons =  $8.3 \div 79 \approx 0.105$  tons (about 210 pounds).
5. Average all the transects you estimate. If the transects are of different lengths, then weight the average by the respective lengths. Typically three transects for each 1/10<sup>th</sup> - acre plot are recommended.
6. Scale to per-acre by multiplying that averaged number by 237.7

## Step 3. Gather Basic Tools

- Measuring tape or rope marked with distance intervals (e.g., 100 feet for plot boundaries).
- Compass or smartphone with GPS to establish plot boundaries and direction.
- Flagging tape to mark plot corners.
- Notebook and pencil for recording data.
- A basic measuring tape, see below section on tree measurement for details.
- If measuring tree heights find a straight stick that the length above your hand when you hold the stick is the distance from your hand to your eye.
- For the line transect method you will need a cheap pair of calipers.

# Measuring Damaged Standing Trees

## Step 4. Tree Measurement

Measure each tree for DBH (diameter at breast height) and tonnage by product. If you do not have a DBH tape (can also be found at forestry suppliers, use the following method to measure basal area for each tree calculated.

1. Wrap the measuring tape (or a piece of string) around the tree at 4.5 feet above the ground.
2. Record the measured distance around the tree, which is the circumference (C).
3. Calculate the diameter (D) using the formula:

$$D = \frac{C}{3.1459}$$

Example: If the circumference is 31.4 inches:

$$D = \frac{31.4}{3.1459} = 10 \text{ inches (dbh)}$$

For leaning trees, DBH is still measured at 4.5 feet above the ground, but make sure you do so from the uphill side of the tree. Stand to the side of the trunk such that your line of sight is perpendicular to the trunk's centerline, not parallel to its lean. Imagine slicing the trunk at this height—your measurement should represent the diameter of that cross-section. The measuring tape must be perpendicular to the trunk's axis, not the ground. If it follows the lean or is at an angle, it will overestimate the diameter. When a tree leans, the trunk's

cross-section viewed from the side appears elliptical, but the diameter measurement assumes a circular cross-section. Wrapping the tape perpendicular to the trunk's axis ensures the true diameter is captured, maintaining consistency with forestry standards.

There is some variation depending on your market and the classification of the tree but general rules are that any pine tree equal to or above 12-inch DBH is sawtimber (Pine chip-n-saw is usually 9–11-inch DBH). A minimum DBH for hardwoods in our region is 14 inches. You'll also want to make notes in your tally sheet about any pine trees you think are still suitable for poles as these draw a premium for stumpage prices and are more likely to entice operations. Things to look for are as follows.

When picking trees to be used as poles, a logger will look for the following general criteria:

- 14–20" DBH
- 35–40' height, or more
- Straight healthy trunk with few limbs
- Less than 1" sweep for every 10 feet of stem
- Less than 4 knots per linear foot, and less than 6" diameter of knots per linear foot
- No branches in the first 10 feet
- No sharp angled branches or a fork at less than 32 feet
- No stem cankers for at least 32 feet

Keep in mind if a tree is severely damaged, it is unlikely that it will be classified as sawtimber and certainly not poles, particularly if your salvage doesn't occur for several months. In short, much of your sawtimber that would normally be sold for lumber and other dimensional

products will be immediately downgraded to pulpwood (due to internal damage to water columns and mill specifications), and this will only worsen as time passes. Table 1 provides a general guide for product timelines as the logs dry out, insects attack, and decay occurs.

**Table 1. Timeline for specific pine and hardwood products**

Product	Harvest Within	Comments
Pine and Hardwood veneer and appearance lumber, sawtimber	4-6 weeks	Blue stain prohibits use if left longer
Pine framing lumber, sawtimber and chip-n-saw	3-4 weeks	should be Kiln dried to prevent emergence of secondary insects
Pine posts,	4-6 weeks	Blue stain will affect toughness and preservative treatment
Pine and Hardwood pulp, fiberboard, particleboard and OSB	8-12 months	As wood begins to decay, pulping process will be affected. Storm damaged wood should be mixed with sound wood.
Pine and Hardwood firewood	8-12 months	AS wood dries out, the heat values increases prior to the decay process

## Step 5. Assess Tree Condition

The tricky part is not in measuring the obviously damaged trees, those that are snapped off or uprooted entirely are fairly straightforward judgements but what about standing trees that are leaning and/or have a portion of their limbs or crown missing? Let's discuss a few rules of thumb you can use to further refine estimates of damage post-storm event. Table 2 shows some guidelines for making this subjective classification.

In your tally sheet (Table 3a and 3b as a basic example), make any useful notes

about the tree, see the below table (3a) for an example. For a more detailed calculation of damaged volume, delineate between pulpwood and sawtimber and add a column to distinguish. While the DBH should be the clue for this, it can help with stem counts and organization.

Continue to the next Plot #, measure all the damaged trees. You can also decide here if you want to measure the undamaged trees in the plot as well. My preference is to go back through and do undamaged separately but this is more time consuming. See the section on measuring undamaged trees.

**Table 2. Tree Damage Categories and Recommendations**

Damage Category	Branch Loss	Lean/Bend	Characteristics	Recommended Action
Minor	<25%	<20%	No structural damage, good foliage	Retain and monitor for stability and growth.
Moderate	25-44%	1 O'clock	Moderate lean, may survive 2-5 years	Retain temporarily; monitor for safety.
Major	45-69%	40-59%	Broken tops, major wounds; reduced timber value	Immediate salvage recommended.
Critical	70%+	2 O'clock	Severe structural damage or instability	Immediate salvage required.
Uprooted	Not Applicable	Not Applicable	Stable root exposure, minimal splitting	Harvest within 2-3 months to avoid decay.
Severe Breakage (snapped)	Not Applicable	Not Applicable	Splintered tops or snapped bole, internal fiber damage	Immediate salvage required.

**Table 3a. Example of Tally sheet information for damaged trees in designated plots**

Plot #	Tree ID	Circumference (in)	DBH (in)	Condition	Notes
1	Tree 1	25	8	Damaged	Broken top
1	Tree 2	30	9.6	Severely Damaged	Snapped trunk
1	Tree 3	18	5.7	Moderate Damage	1/3 of branches missing, 1 o'clock lean

## Step 6. Calculate the tons of timber

To calculate tons of timber:

- You need the **DBH** and an estimate of **tree height** (optional, but helps improve accuracy).
- Use a **tree volume table or formula** to estimate the tree's volume (in cubic feet).
- Convert the volume to tons using standard conversion factors.

## Step 7. Estimate Tree Volume and Weight

While there are steps for individually measuring each tree's height, given the time and technical constraints, we recommend that the landowner utilize their DBH calculations and estimate using the volume-to-weight conversion tables in the following documents that do not require height measurements. While this makes the estimations less accurate, given the time

constraints and precision concerns this is the recommended action. For Pine tree estimations use the Landowner's Guide to Determining Weight and Value of Standing Pine Trees (FSA 5017R) and for various hardwood species use Landowner's Guide to Determining Weight of Standing Hardwood Trees (FSA 5021). Both of these publications provide volumes for individual tree weight for several popular species.

## Step 8. Scale Up

- Use the landowner guide to determining weight and value publications mentioned in the previous section.
- Convert the total volume to tons for each tree
- After measuring trees in the plot
- Count damaged trees per plot.
- Multiply by the number of plots required to equal one acre (e.g., 10 for 1/10th-acre plots, even if you didn't measure 10 plots).

## Example

You record 3 damaged trees in a 1/10th-acre plot, 2 in a second, and 4 in a third plot. Do this for each plot you've identified and take the average number of damaged trees per plot (so an average of 3 per plot).

Because you are utilizing 1/10th acre plot measurements, you need to scale up to acres accordingly.

→ 3 (average) x 10 = 30 damaged trees per acre. (since these are 1/10th acre plots, you multiply by 10 as if you measured the entire acre to get the scaling correct and have an acre-wide measurement).

Once you have those numbers, apply to the entire forest area that you are sampling.

For a 50-acre forest: 30 x 50 = 1,500 damaged trees (this can be useful operators to gauge the value of the job along with the next number). Now you need the volumes for each acre.

So now you know the number of trees damaged per acre and the total number of damaged trees, time to calculate the tonnage.

## Step 9. Extrapolate to the whole stand

First you need to determine the per acre average of volume. Multiply the weight of timber per plot by the number of plots to

equal one acre:

$$\text{Tons per acre} = \text{Tons per plot} * 10 \\ (\text{for } 1/10\text{th acre plots})$$

For each tree has volumes and weight you've entered using step 7, then add up the total weight (sum of all the trees you measured) in each plot. Now scale up to acres.

Example: Assume you measured 3.14 tons per plot as an average:

$$\text{Tons per acre} = 3.14 * 10 = 31.4 \text{ tons}$$

Then, multiply by the total number of acres in the forest:

$$\text{Total Tons} = \text{Tons per acre} * \text{Total Acres}$$

Example for a 50-acre forest:

$$\text{Total Tons} = 31.4 * 50 = 1,570 \text{ tons}$$

So, from our examples you have a total of 1,570 tons and 1,500 damaged trees. So, each tree is roughly 1 ton or 2,000 lbs. A reasonable average for mature freshly downed loblolly pine trees (upper end). Probably high considering our example is damaged trees. This would give you an average of 31.4 tons per acre. Keep in mind, loggers are likely to be pickier since there is such a rush of demand at this time (right after a storm). The difficulty of the job (how difficult is it to operate in the stand).

## Step 10. Measuring the undamaged trees

**Use the Same Sample Plots.** For consistency, measure undamaged trees in the **same 1/10th-acre plots** you set up for damaged trees. If you've already measured damaged trees, make a second pass to measure **undamaged trees** in the same plots. You can do them in combination to avoid measuring the same tree as both damaged and undamaged (strong chance in instances of mild damage).

Follow the same steps as above to measure volume and weight for undamaged trees.

## Step 11. Combine Results

Once you've calculated tons for both damaged and undamaged trees, you can summarize:

- Total tons of damaged timber and per-acre estimates
- Total tons of undamaged timber and per-acre estimates

Percentage of total forest impacted:

$$\text{Percentage damaged} = \frac{\text{Damaged Tons}}{\text{Total Tons}} * 100$$

**Table 3b. Tally sheet example for undamaged trees in designated plots**

Plot #	Tree ID	Circumference (in)	DBH (in)	Condition	Notes
1	Tree 1	25	8	Damaged	Broken top
1	Tree 2	30	9.6	Severely Damaged	Snapped trunk
1	Tree 3	18	5.7	Minor Damage	No visible breakage, but 1 o'clock lean
1	Tree 4	37	11.8	Undamaged	second pass through plot 1 for undamaged trees
1	Tree 4	41	13.1	Undamaged	second pass through plot 1 for undamaged trees
1	Tree 6	44	14	Undamaged	second pass through plot 1 for undamaged trees

# Is there enough for Salvage?

Now that the landowner has measured the volume of damaged trees and the degree of damage, the decision of whether or not to salvage becomes the next question. See the below flow chart for rules of thumb for the salvage or no salvage decision-making. First, the landowner must determine if there is enough standing material (undamaged/minor damage) to continue the stand. See Tables 4–6 for rules of thumb for tonnage and standing trees per acre for decision-making.

If the standing trees measured are either 15 tons of sawtimber or 25 tons of pulpwood per acre, you generally have enough volume to conduct an operational harvest in the future (Table 4). Remember loggers need a certain amount of volume per acre (or total tonnage) to make operating on the property worthwhile. It is also important to understand the number of trees in the stand (stocking), too few trees of any size and the stand is not carrying an optimal number of trees which makes carrying the stand for several years a poor financial proposition. Tables 5 and 6 provide general guidelines for the necessary number of trees for different DBH sizes for both pine and hardwoods. You'll see the terms B-line, C-10, and C-20 in Table 6. These refer to stocking guides in forestry, particularly for managing hardwoods (or uneven-aged stands). These terms are used to help determine how well a stand is stocked based on the relationship

between tree size (DBH) and the number of trees per acre. The B-line represents the lower threshold of full stocking for a forest stand. Below this line, the stand is considered understocked, meaning there aren't enough trees to utilize the site's productive capacity fully. The C-10 line represents a stand that is 10 years away from full stocking. It shows the number of trees per acre required for the stand to reach the B-line in 10 years, assuming typical growth rates for the species.

This is a tricky area though, because how likely are stands to show typical growth rates in the next ten years if a storm has hit them. Even trees that look undamaged can have some damage to water columns in the tree and/or the more obvious crown and limb reduction that would reduce the ability to return to the B-line. Further, even minor damage can lead to a lost butt log in the future due to wood rot.

We advise a conservative approach in these cases. For Pine, the B-line/C-line is not used (unless you have an uneven age stand) but the Trees Per Acre guidelines operate in much the same way for decision-making. Too few trees and the understocking reduce the profitability of the stand and also allows for undesired species to increase in numbers due to additional openings in the canopy. Pines are typically a fast-growing species relative to most of their hardwood cousins but the same damage concerns are relevant.

If the landowner has an operationally viable tonnage of standing trees then it is advised to let those grow as the market will be flooded with timber after a large-scale storm. Holding the trees even if it's for 1-2 years is highly advised from a profitability standpoint and simple logistics as finding a logging operator will be difficult in the months right after one of these events. Alternatively, if what is left standing and undamaged (or lightly damaged) cannot justify a future harvest on its own, it is best to liquidate the stand and start over to

avoid carrying costs that will not be offset with a future timber harvest. Better to cut what is left and replant the stand with a new rotation of fast growing and well stocked trees. If you don't have enough timber standing for a future harvest but do have enough damaged to entice a logger to the property it is highly advised you seek a professional consultant to help manage the timber sale as salvage logging is more complex operationally and not all operators have salvage logging experienced.

**Table 4. Timber Stand Salvage Decision Model**

	Is There 15 tons/acre sawtimber (or 25 tons/acre pulpwood) undamaged?	Is There 15 tons/acre sawtimber (or 25 tons/acre pulpwood) damaged?	Management Decision
Many smaller, more plentiful number of trees		YES	Salvage damaged timber, manage or rehab the stand
	YES		
		NO	No salvage, manage or rehab the stand
Fewer, larger, more valuable trees or almost no standing smaller trees		YES	Salvage damaged trees, hold good trees for better price
	YES		
		NO	No salvage, hold good trees for a better price
		YES	Salvage all timber, site prep and replant
	NO		
		NO	No salvage (not enough tonnage to commercially harvest)

**Table 5. Pine Stocking Guide after a storm**

	Harvest	Rehab	Manage
DBH	Trees per acre		
8	86	115	143
10	55	73	92
12	38	51	64
14	28	37	47
16	21	29	36
18	17	23	28
20	14	18	23
22	11	15	19
24	10	13	16
26	8	11	14

**Table 6. Hardwood Stocking Guide after a storm**

DBH	B-line TPA	C-10 TPA	C-20 TPA
4	321	172	103
6	229	132	81
8	163	100	63
10	128	79	48
12	95	64	42
14	78	51	35
16	62	43	30
18	52	37	27
20	44	32	25

# Conclusions

Storm-damaged timber presents significant challenges for landowners, requiring prompt and informed decision-making to balance recovery, profitability, and long-term forest health. This guide has outlined practical steps to assess and document damage, develop sampling plans, and evaluating the potential for salvage operations. By carefully analyzing the extent of damage, calculating volumes and weights, and considering market conditions, landowners can make decisions that optimize both immediate recovery and future forest productivity. Timber begins to deteriorate quickly after storm damage. Salvage operations must be initiated promptly, particularly for high-value products like sawtimber and veneer. Accurate records, including maps, photos, and measurements, are essential for insurance claims, tax purposes, and informed management decisions. Post-storm conditions can be hazardous.

Landowners must prioritize personal safety by using appropriate protective equipment and avoiding unstable areas. Decisions should weigh the volume and quality of damaged and undamaged timber against operational and market constraints. Salvage is only feasible when sufficient tonnage exists to attract loggers. Where salvage is not viable, rehabilitation or replanting offers a pathway to restoring stand productivity and ecological function.

Finally, engaging with professional foresters, consultants, and extension services can provide invaluable expertise, especially in complex salvage operations. While this guide equips landowners with foundational knowledge, professional input is strongly recommended for maximizing returns and ensuring sustainable forest management. By following these recommendations, landowners can navigate the challenges of storm recovery and position their forests for a resilient future.



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The Arkansas Center for Forest Business provides technical assistance for market-based solutions to forest resource challenges, programs for degree and post-baccalaureate education, and information on timber supply, forest products markets, and operational efficiency.

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