



## Understanding Casualty Loss of Timber

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One of the most common questions regarding tax treatment of timber has to do with casualty losses. According to the Internal Revenue Service (IRS), a casualty is defined as the damage, destruction or loss of a property resulting from an identifiable event that is **sudden, unexpected or unusual**. From a timber investment standpoint, the most common causes of casualty losses are fires, wind storms, ice storms, vandalism, floods and earthquakes. It is important to understand that losses in timber due to progressive deterioration, such as fungus, diseases, insects, worms, or similar pests<sup>1</sup> are typically not considered casualty losses, because they are not sudden, unexpected or unusual.

The IRS allows timberland owners to take a deduction on their Federal income tax return for casualty losses. However, because most private timberland owners hold timber as a business or an investment, the amount of the deduction is the *smaller of the adjusted basis of timber or the difference of the fair market value immediately before and after the casualty*. There are two major tax concepts involved in determining a casualty loss deduction: “adjusted basis” and “fair market value.” Following an explanation of these concepts, two case studies will illustrate their application in determining a casualty loss deduction for damaged timber.

### Adjusted Basis

The IRS defines basis as the amount of your investment in property for tax purposes. When calculating casualty loss deductions, it is important to remember that if you have no basis, you have no deduction. Typically, basis is established at the time the timber property is acquired; either through purchase, trade, inheritance or gift. However, basis may be calculated retroactively with the help of a professional forester who can assist in estimating the value and volume of timber at the time of acquisition through a process known as “un-growing” the trees<sup>ii</sup>. Although basis

can be established retroactively, the landowner must weigh the cost of establishing a basis using this process against the potential casualty loss deduction. Adjusted basis is the original basis plus or minus any investments or reductions, such as those reductions due to timber sales. The focus of this paper is not the details of establishing basis<sup>iii</sup>; however, it is important to understand that the way timber property is acquired has a dramatic impact on the casualty loss deduction. Briefly, purchased property’s original basis is the total acquisition cost of the asset; inherited property’s original basis is the fair market value at the time of inheritance; and gifted property’s basis is the donor’s basis carried over to the recipient. The timber basis is separated from the land basis.

### Fair Market Value

According to the IRS, Fair Market Value (FMV) is defined as the price for which you could sell your property to a willing buyer when neither of you have to sell nor buy and both of you know all the relevant facts. The IRS further defines the decrease in FMV used to figure the amount of a casualty loss as the difference between the FMV immediately before and immediately after the casualty.

### The IRS recognizes two methods for determining FMV

- 1) Appraisal;
- 2) Cost to clean up or make repairs.

It should be noted that clean up costs are more applicable to damage of landscaping trees around a home site, not timber. With the case of timber damage, the value can be estimated based on the volume and value before the casualty, and the volume and value after the casualty. Salvage harvests must be deducted from the difference. For example, suppose that a landowner had \$50,000 worth of timber on May 15. On May 16, a wind storm blows down a portion of his timber. His loss in FMV is estimated to be about \$15,000. However, further assume that he is able to sell this timber that was blown down in a salvage cut for \$5,000. Now his actual loss in FMV is \$10,000. The following case studies will attempt to apply these ideas in a “real-world”



**The IRS does not consider the cost of repairing damaged property or the cost to clean up after a casualty; however, it is considered a measure of the decrease in FMV as long as:**

- The repairs are actually made;
- The repairs will bring the property back to its original condition;
- The amount spent is not excessive;
- The repairs take care of the damage only;
- Value of the property after the repairs does not exceed the value of the property before the damage<sup>iv</sup>.

example. It should be noted that tax laws are complex and these case studies are designed to simplify the concept being applied.

### Case Study 1: Farmer Johnson's Wind Storm

Farmer Johnson purchases a farm with a total of 100 acres (50 acres cropland and 50 acres timber) for \$100,000 in November 2000. The farm is part of a business or income-producing property and the timber is held as an investment and is not a property held for personal use. The original basis in the property as a whole is the \$100,000. Farmer Johnson did not separate out the value of his assets or establish a basis on his timber at that time. More specifically, Farmer Johnson did not estimate what portion of the purchase price was for the cropland and what portion of the purchase price was for the timberland. In May 2009, a wind storm destroys 25 acres of his timber.

**Is this a casualty loss?** This is a casualty because the event was sudden, unexpected and unusual. However, Farmer Johnson has a real problem since he had never established basis on his timber at the time of purchase. Remember, no basis, no deduction. This is a problem that can be overcome. Farmer Johnson needs to decide if the potential deduction from his taxes will be greater than the cost to hire a professional forester for the sake of retroactively establishing basis. Until a basis is established, the IRS will not recognize the casualty loss.

**How can Farmer Johnson establish a basis?** To keep this problem simple we will assume that the market value for cropland in 2000 was \$1,700 per acre and the forested bare land value in 2000 was \$100 per acre (as determined by an appraisal of the property used for mortgage financing

at the time of purchase). We also can assume that Farmer Johnson hires a professional forester to conduct a timber cruise after the wind storm to help him establish basis. Based on the appraised value of the cropland and the forested bare land, combined with the original timber value determined by the professional forester, the FMV of the cropland and the timber is illustrated below:

Amount paid for property, 2000 (Original Basis)	\$100,000
Cropland Value, 2000 <sup>v</sup> (\$1,700x50 acres)	\$85,000
Forested Bare Land Value, 2000 (\$100x50 acres)	\$5,000
Timber Value, 2000 (det. by retroactive cruise)	\$25,000
Total FMV property (det. by appraisal, retro. cruise)	\$115,000

Table 1, below, shows how the original basis is calculated for the property using the information from the appraisal and retroactive timber cruise to estimate a percentage of the acquisition amount for each asset class. Since the timber cruise was specific to the timber investment, the cost of the professional forester can be added to the basis for the timber account.

The forested bare land value represents the value for the land where the timber is growing (timberland value consists of two assets: the standing timber and the land on which the timber stands). The timber value can be further divided into merchantable timber and pre-merchantable timber. This is where the professional forester comes in. The professional forester can estimate the growth rate of the timber by taking core samples or looking at growth rings and determine number of trees that would have been merchantable and pre-merchantable at the time of acquisition. A professional forester can also determine the market value of that timber at the time of acquisition. It is important to understand that the market value estimate calculated by the professional forester is not the basis in the timber; it can be used to allocate the original basis among the assets which make up the total asset and to estimate the depletion units. The original basis in the timber is the \$21,700 estimated from the price paid.

The professional forester estimated that in 2000 there was 173 MBF of merchantable timber at a market value of \$25,000. The cost per unit (in this case MBF) is \$21,700/173 MBF or \$125.43/MBF. Farmer Johnson should complete Form T, Part I (see Figure 1, page 3). This original basis per thousand board feet of merchantable timber represents a

**Table 1.** Allocation of Farmer Johnson's original basis to three asset classes.

Asset	Asset value/total FMV	Proportion	Allocated Basis
Cropland	\$85,000/\$115,000	74% of value	\$74,000
Bareland	\$ 5,000/\$115,000	4.3% of value	\$ 4,300
Timber	\$25,000/\$115,000	21.7% of value	\$21,700
		100%	\$100,000

Name(s) as shown on return

Identifying number

**Farmer Johnson**

XXX-XX-XXXX

**Part I Acquisitions**

**1** Name of block and title of account  
100 Acre Farm

**2** Location of property (by legal subdivisions or map surveys)  
100 acres located in SXX TXX RXX

<b>3a</b> Name and address of seller or person from whom property was acquired	<b>b</b> Date acquired
<u>Farmer Davis</u> <u>RR1 Box 1098</u>	<u>November 2000</u>

**4** Amount paid: **a** In cash \$100,000  
**b** In interest-bearing notes  
**c** In non-interest-bearing notes

**5a** Amount of other consideration  
**b** Explain the nature of other consideration and how you determined the amount shown on line 5a.

**6** Legal expenses

**7** Cruising, surveying, and other acquisition expenses

**8** Total cost or other basis of property. Add lines 4a through 7 \$100,000

<b>9</b> Allocation of total cost or other basis on books:	Unit	Number of units	Cost or other basis per unit	Total cost or other basis
<b>a</b> Forested land	Acre	<u>50</u>	<u>86</u>	<u>\$4,300</u>
<b>b</b> Other unimproved land	Acre			
<b>c</b> Improved land (describe) ▶ <u>Cropland</u>	Acre	<u>50</u>	<u>1480</u>	<u>\$74,000</u>
<b>d</b> Merchantable timber. Estimate the quantity of merchantable timber present on the acquisition date (see Regulations section 1.611-3(e)). Details of the timber estimate, made for purposes of the acquisition, should be available if your return is examined.	MBF	<u>173</u>	<u>\$125.43</u>	<u>\$21,700</u>
<b>e</b> Premerchantable timber. Make an allocation here only if it is a factor in the total cost or value of the land.				
<b>f</b> Improvements (list separately)				
<b>g</b> Mineral rights				
<b>h</b> Total cost or other basis (same amount as line 8). Add lines 9a through 9g				<u>\$100,000</u>

For Paperwork Reduction Act Notice, see separate instructions.

Cat. No. 16717G

Form **T (Timber)** (Rev. 12-2005)

Figure 1. Form T Part I, for Farmer Johnson's 100-acre farm.

**Part II Timber Depletion** (see instructions)

<b>1</b> Name of block and title of account ▶ <b>100 acre tract Timber</b>		
If you express timber quantity in thousand board feet (MBF), log scale, name the log rule used. If another unit of measure is used, provide details ▶ <b>Doyle Log Scale</b>		
	<b>(a) Quantity</b>	<b>(b) Cost or other basis</b>
<b>2</b> Estimated quantity of timber and cost or other basis returnable through depletion at end of the preceding tax year . . . . .	<b>173</b>	<b>\$21,700</b>
<b>3</b> Increase or decrease of quantity of timber required by way of correction . . . . .		
<b>4a</b> Addition for growth (number of years covered ▶ <b>9</b> ) . . . . .	<b>27</b>	
<b>b</b> Transfers from premerchantable timber account . . . . .		
<b>c</b> Transfers from deferred reforestation account . . . . .		
<b>5</b> Timber acquired during tax year . . . . .		<b>\$1000</b>
<b>6</b> Addition to capital during tax year . . . . .		
<b>7</b> Total at end of tax year, before depletion. Add lines 2 through 6 . . . . .	<b>200</b>	<b>\$22,700</b>
<b>8</b> Unit rate returnable through depletion, or basis of sales or losses. Divide line 7, column (b), by line 7, column (a) . . . . .		<b>\$113.50</b>
<b>9</b> Quantity of timber cut during tax year . . . . .		

**Figure 2.** Form T Part II, Line 1 through Line 9, for Farmer Johnson's 100-acre farm.

depletion unit value. Farmer Johnson paid the professional forester \$1,000 for the consultation (See Figure 2, Form T, Part II, Line 6, Additions to Capital). The adjusted basis in the timberland is now \$22,700 (\$21,700 paid in 2000 plus \$1,000 for professional forester fees in 2009). The professional forester further determines the trees were growing at a rate of 3 MBF per year for the last 9 years. Therefore, the new depletion unit is \$22,700/ (173 MBF + (3MBF/YR x 9 years)) = \$113.50/MBF, as shown in Form T, Part II, line 8 (see Figure 2, above).

**How much can Farmer Johnson deduct from his income taxes?** The casualty loss deduction is the smaller of the adjusted basis of timber or the difference of the fair market value immediately before and after the casualty. The adjusted basis in the single identifiable property (SIP) known as merchantable timber is \$21,700. This is the most that can be deducted. A SIP can be the entire timber stand, individual units of timber, or even distinguishable tracts of timber within the timber stand. In this case, the timber property is treated as a single unit and the basis accounts are set up that way, so the SIP is the entire 50 acres of timber.

To estimate the change in FMV, Farmer Johnson is going to have to rely on the professional forester to estimate the FMV before and after the casualty loss event. Going back to the answer for the question on basis above, the professional forester estimated the trees were growing at a rate of 3 MBF per year and there were approximately 200 MBF of

merchantable timber just prior to the casualty loss. Further, assume that half of the timber was either damaged or destroyed by the windstorm in April. The professional forester indicates that the FMV of the timber before it was damaged was \$0.15 per board foot or \$30,000 total (\$0.15 per BF X 200 MBF). The professional forester also estimated that 10 MBF was destroyed (no salvage value) and 90 MBF was damaged and now has an estimated value of \$0.10 per board foot; therefore, the FMV after the wind storm is \$24,000 as illustrated below:

100 MBF x \$0.15/BF (undamaged)	\$15,000
90 MBF x \$0.10/BF (damaged)	\$9,000
10 MBF x \$0 (destroyed)	\$0
FMV after wind storm	\$24,000

The decrease in FMV is \$6,000 (\$30,000 - \$24,000). Since the adjusted basis in the timber is greater than the decrease in FMV of the SIP, the maximum casualty loss deduction that Farmer Johnson can take is \$6,000.

The IRS further requires that a reasonable effort must be made to sell damaged timber that is not considered totally unmerchantable<sup>vi</sup>. If a gain is realized from the sale of the damaged timber (in other words, if Farmer Johnson can sell the damaged timber for more than the adjusted basis) this should be reported as a capital gain and an involuntary conversion.

**How should Farmer Johnson report the casualty?** There is some flexibility in how Farmer Johnson may choose to report the casualty gain or loss. However, it is important to note any loss must be reported on the tax return for the year in which the loss occurred.

Assume that Farmer Johnson attempts to sell the 10 MBF of timber that was damaged as required by the IRS and cannot find a buyer to salvage it. The remaining 90 MBF of damaged timber will be left to grow. Farmer Johnson fills out Form 4684, Casualties and Thefts, Section B, Part I, lines 25 through 34 as shown in Figure 3, below. Line 27 of Form 4684, Section B, Part I reflects any actual or expected payments from insurance if the timber was insured. Because

this timber stand is an investment for Farmer Johnson, any casualty loss would be reported on Form 1040, Schedule A, Line 28.

Since 10 MBF of timber was completely destroyed, on Form T, Part II, Line 13a, enter 10 MBF and on Line 14b enter \$6,000 (see Figure 4, page 6). Form T is an informational form and only needs to be submitted if a depletion deduction is going to be claimed or timber is sold under section 631(a) or 631(b). For investors who only sell timber occasionally, the Form T is not required; however, the IRS does require any timber seller to maintain the same information as is found on Form T but they may use their own format.

**Figure 3. Form 4684, Casualties and Thefts, Section B**

Form 4684 (2008)		Attachment Sequence No. 26		Page 2	
Name(s) shown on tax return. Do not enter name and identifying number if shown on other side.				Identifying number	
Farmer Johnson				XXX-XX-XXXX	
<b>SECTION B—Business and Income-Producing Property</b>					
<b>Part I Casualty or Theft Gain or Loss</b> (Use a separate Part I for each casualty or theft.)					
25 Description of properties (show type, location, and date acquired for each property). Use a separate line for each property lost or damaged from the same casualty or theft.					
Property A 100 Acre Tract					
Property B					
Property C					
Property D					
		<b>Properties</b>			
		<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
26	Cost or adjusted basis of each property . . . . .	22	700		
27	Insurance or other reimbursement (whether or not you filed a claim). See the instructions for line 3 . . . . .				
<i>Note: If line 26 is more than line 27, skip line 28.</i>					
28	Gain from casualty or theft. If line 27 is more than line 26, enter the difference here and on line 35 or line 40, column (c), except as provided in the instructions for line 39. Also, skip lines 29 through 33 for that column. See the instructions for line 4 if line 27 includes insurance or other reimbursement you did not claim, or you received payment for your loss in a later tax year. . . . .				
29	Fair market value before casualty or theft . . . . .	30	000		
30	Fair market value after casualty or theft. . . . .	24	000		
31	Subtract line 30 from line 29 . . . . .	6	000		
32	Enter the smaller of line 26 or line 31 . . . . .	6	000		
<i>Note: If the property was totally destroyed by casualty or lost from theft, enter on line 32 the amount from line 26.</i>					
33	Subtract line 27 from line 32. If zero or less, enter -0- . . . . .	6	000		
34	Casualty or theft loss. Add the amounts on line 33. Enter the total here and on line 35 or line 40 (see instructions) . . . . .			6	000
<b>Part II Summary of Gains and Losses</b> (from separate Parts I)		<b>(b) Losses from casualties or thefts</b>		<b>(c) Gains from casualties or thefts includible in income</b>	
<b>(a) Identify casualty or theft</b>		<b>(i) Trade, business, rental or royalty property</b>		<b>(ii) Income-producing and employee property</b>	
<b>Casualty or Theft of Property Held One Year or Less</b>					
35					
36	Totals. Add the amounts on line 35 . . . . .	36			
37	Combine line 36, columns (b)(i) and (c). Enter the net gain or (loss) here and on Form 4797, line 14. If Form 4797 is not otherwise required, see instructions . . . . .			37	
38	Enter the amount from line 36, column (b)(ii) here. Individuals, enter the amount from income-producing property on Schedule A (Form 1040), line 28, or Form 1040NR, Schedule A, line 16, and enter the amount from property used as an employee on Schedule A (Form 1040), line 23, or Form 1040NR, Schedule A, line 11. Estates and trusts, partnerships, and S corporations, see instructions . . . . .			38	
<b>Casualty or Theft of Property Held More Than One Year</b>					
39	Casualty or theft gains from Form 4797, line 32 . . . . .			39	00
40	100 Acre Tract (100 MBF of Timber)			6000	00
41	Total losses. Add amounts on line 40, columns (b)(i) and (b)(ii) . . . . .	41		6000	00
42	Total gains. Add lines 39 and 40, column (c) . . . . .			42	
43	Add amounts on line 41, columns (b)(i) and (b)(ii) . . . . .			43	6 000
44	If the loss on line 43 is more than the gain on line 42:				
a Combine line 41, column (b)(i) and line 42, and enter the net gain or (loss) here. Partnerships (except electing large partnerships) and S corporations, see the note below. All others, enter this amount on Form 4797, line 14. If Form 4797 is not otherwise required, see instructions . . . . .					
b Enter the amount from line 41, column (b)(ii) here. Individuals, enter the amount from income-producing property on Schedule A (Form 1040), line 28, or Form 1040NR, Schedule A, line 16, and enter the amount from property used as an employee on Schedule A (Form 1040), line 23, or Form 1040NR, Schedule A, line 11. Estates and trusts, enter on the "Other deductions" line of your tax return. Partnerships (except electing large partnerships) and S corporations, see the note below. Electing large partnerships, enter on Form 1065-B, Part II, line 11. . . . .					
44a					
44b				44b	6 000
45	If the loss on line 43 is less than or equal to the gain on line 42, combine lines 42 and 43 and enter here. Partnerships (except electing large partnerships), see the note below. All others, enter this amount on Form 4797, line 3 . . . . .				
<i>Note: Partnerships, enter the amount from line 44a, 44b, or line 45 on Form 1065, Schedule K, line 11. S corporations, enter the amount from line 44a or 44b on Form 1120S, Schedule K, line 10.</i>					

**Part II Timber Depletion** (see instructions)

**1** Name of block and title of account ▶ 100 acre tract Timber

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If you express timber quantity in thousand board feet (MBF), log scale, name the log rule used. If another unit of measure is used, provide details ▶ Doyle Log Scale

	(a) Quantity	(b) Cost or other basis
<b>2</b> Estimated quantity of timber and cost or other basis returnable through depletion at end of the preceding tax year . . . . .	173	\$21,700
<b>3</b> Increase or decrease of quantity of timber required by way of correction . . . . .		
<b>4a</b> Addition for growth (number of years covered ▶ <u>9</u> ) . . . . .	27	
<b>b</b> Transfers from premerchanted timber account . . . . .		
<b>c</b> Transfers from deferred reforestation account . . . . .		
<b>5</b> Timber acquired during tax year . . . . .		\$1000
<b>6</b> Addition to capital during tax year . . . . .		
<b>7</b> Total at end of tax year, before depletion. Add lines 2 through 6 . . . . .	200	\$22,700
<b>8</b> Unit rate returnable through depletion, or basis of sales or losses. Divide line 7, column (b), by line 7, column (a) . . . . .		\$113.50
<b>9</b> Quantity of timber cut during tax year . . . . .		
<b>10</b> Depletion for the current tax year. Multiply line 8 by line 9 . . . . .		
<b>11</b> Quantity of standing timber sold or otherwise disposed of during tax year. . . . .		
<b>12</b> Allowable as basis of sale. Multiply line 8 by line 11 . . . . .		
<b>13</b> Quantity of standing timber lost by fire or other cause during tax year . . . . .	10	
<b>14</b> Allowable basis of loss plus any excess amount where decrease in FMV (before and after the casualty) exceeds the standard depletion amount, but not the block basis (see instructions) . . . . .		\$6,000
<b>15</b> Total reductions during tax year:	10	
<b>a</b> In column (a), add lines 9, 11, and 13 . . . . .		
<b>b</b> In column (b), add lines 10, 12, and 14 . . . . .		\$6,000
<b>16</b> Net quantity and value at end of tax year. In column (a), subtract line 15a from line 7. In column (b), subtract line 15b from line 7 . . . . .	190	\$16,700
<b>17</b> Quantity of cut timber that was sold as logs or other rough products . . . . .		
<b>18 Section 631(a):</b>		
<b>a</b> Are you electing, or have you made an election in a prior tax year that is in effect, to report gains or losses from the cutting of timber under section 631(a)? (see instructions) . . . . .	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>b</b> Are you revoking your section 631(a) election (see instructions)? . . . . .	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Effective date ▶		

Figure 4. Form T, Part II, reflecting Farmer Johnson's casualty loss.

## Case Study 2: Mr. and Mrs. Smith's Two-Year Troubles

John and Mary Smith purchased a 200-acre farm in 2002 for \$120,000. The farm consisted of 40 acres of pasture, 20 acres of cropland, 5 acres of merchantable native black walnut along a perennial stream, 25 acres of merchantable, high quality white and red oaks, 75 acres of upland oak/hickory, 20 acres of young, pre-merchantable white oak, and 15 acres of old field. In 2003 the Smiths converted the 15 acres of old field into a black walnut plantation. Their objectives were to grow the walnuts for nutmeat production and saw-timber in the long-run. The Smiths received cost-share funds through the USDA Natural Resource Conservation Service's (NRCS) Environmental Quality Incentive Program (EQIP) to help establish the black walnut plantation.

What would be the best way for the Smiths to establish and report their basis in this timber? Mr. and Mrs. Smith hire a professional forester to assist them in establishing basis. Table 2, below, shows the estimated volumes and values calculated by the professional forester for the date in which the farm was acquired.

The Smiths took out a mortgage on the farm at the time of purchase and received a copy of the appraisal report submitted to the bank for the loan portfolio. The FMV estimates are taken from the mortgage appraisal for the pasture, cropland and old field/forested bare land. Based on the appraisal and the professional forester's information, the Smiths can calculate their basis in the 200 acre farm. The appraiser and the professional forester estimated that the value of the farm assets were as shown in Table 3, below.

**Table 2.** Professional Forester's appraisal of timber volume and value for Mr. and Mrs. Smith including the percentage of each class to total value for Year 2002.

Class/Type/Area	Volume (2002)	Value (2002)	% Total Value
Merchantable black walnut (5-acre tract)	7,500 bf	\$6,225	14.37%
Merchantable, high-quality white & red oaks (25-acre tract)	54,250 bf	\$9,800	22.62%
Upland oak/hickory (75-acre tract)	168,750 bf	\$26,150	60.36%
Pre-merch. white oak (20-acre tract)	20 acres	\$1,150	2.65%
Pre-merch. black walnut (15-acre tract)	15 acres	\$0	0%
Totals		\$43,325	100%

**Table 3.** FMV of Farm Assets on Date of Acquisition as determined by land and timber appraisals.

Asset	\$/ac	Asset Total	% of Total Farm Value
Pasture (40 acres)	\$650.00	\$26,000	21.34%
Cropland (20 acres)	\$2,000.00	\$40,000	32.83%
Old Field (15 acres)	\$89.00	\$1,335	1.10%
Forested Bare Land (125 acres)	\$89.00	\$11,125	9.13%
Timber		\$43,325	35.56%
Total		\$121,825	100%

Based on these asset value estimates, the Smiths can calculate their basis in the total property as shown in Table 4, below. The numbers do not sum exactly to the \$120,000 original basis amount due to rounding of both the percentages and the asset values.

**Table 4.** Allocation of asset basis for Mr. and Mrs. Smith

Asset	% of Total Farm Value	Asset Total Basis
Pasture (40 acres)	21.34%	\$25,611
Cropland (20 acres)	32.83%	\$39,400
Old Field (15 acres)	1.10%	\$ 1,320
Forested Bare Land (125 acres)	9.13%	\$10,956
Timber Accounts (35.56% of Total Value):		
Class/Type/Area	% of Timber Value	Basis
Merchantable Black Walnut (7,500 bf)	14.37%	\$6,131.97
Merchantable, high-quality white & red oaks (54,250 bf)	22.62%	\$9,652.41
Upland oak/hickory (168,750 bf)	60.36%	\$25,756.82
Pre-merchantable white oak (20 acres)	2.65%	\$1,130.81
<hr/>		
Total Timber Accounts:	35.56%	\$42,676
<hr/>		
Total:	100 %	\$120,000

Since the Smiths went to such detail to estimate the value for each class of timber on their property, they may report their basis as separate timber accounts. An example of a Form T, Forest Activities Schedule, for the 25-acre tract that includes the merchantable, high quality white and red oak is shown in Figure 5, page 9.

**What would the basis be on the 15-acre old field black walnut plantation?** Several factors play into the determination of the basis for the young black walnut. First, according to the scenario, the trees were planted with the help of cost-share funding through the USDA NRCS EQIP program. The amount of the cost-share is not specified; however, in most cases for tree planting, the cost-share is typically around 75 percent of a specified amount.

Second, since USDA NRCS EQIP cost-share qualifies for the Section 126, Cost-Share Exclusion<sup>vii</sup>, the way in which the Smiths reported the cost-share payment will have an impact on the basis in the property.

Finally, Section 194 of the Internal Revenue Code (IRC) allows landowners the ability to deduct up to \$10,000 of reforestation expenses and amortize amounts above \$10,000 on a qualified timber property, where trees are established for the purpose of commercial timber production<sup>viii</sup>. The

15 acres of afforested black walnuts would have qualified for this deduction in the year that they were planted.

If taxes were paid on the cost share payment, it can be included in basis and is eligible for deduction and amortization of Section 194. However, if taxes were excluded, then the amount that is cost-shared is excluded from basis, and is not eligible for the Section 194 deduction and amortization. In either case, the Smiths should have taken advantage of deducting their establishment costs from their ordinary income and not carry a basis on these trees. Their basis should be zero.

**In 2008, an ice storm hits the black walnut plantation causing the stems of the young walnut to break. Is this a casualty loss?** As with Case Study 1, the ice storm would qualify as a sudden, unexpected and unusual casualty loss event. Likewise, the determination of whether it is a deductible loss is not based on whether there was damage, but how the loss in FMV compares to the adjusted basis. Based on the previous discussion of basis and cost-share, the Smiths should have little to no basis in the young black walnut trees. Therefore, their deductible casualty loss should be near zero.

Name(s) as shown on return

Identifying number

**John and Mary Smith**

**XXX-XX-XXXX**

**Part I Acquisitions**

**1** Name of block and title of account  
**200 Acre Woods - Oak Hills**

**2** Location of property (by legal subdivisions or map surveys)  
**SXX TXX RXX**

<b>3a</b> Name and address of seller or person from whom property was acquired	<b>b</b> Date acquired
<b>Farmer Brown</b> <b>RR1</b>	<b>February 2002</b>
<b>4</b> Amount paid: <b>a</b> In cash . . . . .	<b>\$11,843.61</b>
<b>b</b> In interest-bearing notes . . . . .	
<b>c</b> In non-interest-bearing notes . . . . .	
<b>5a</b> Amount of other consideration . . . . .	
<b>b</b> Explain the nature of other consideration and how you determined the amount shown on line 5a. .....	
<b>6</b> Legal expenses . . . . .	
<b>7</b> Cruising, surveying, and other acquisition expenses . . . . .	
<b>8</b> Total cost or other basis of property. Add lines 4a through 7 . . . . .	<b>\$11,843.61</b>

<b>9</b> Allocation of total cost or other basis on books:	<b>Unit</b>	<b>Number of units</b>	<b>Cost or other basis per unit</b>	<b>Total cost or other basis</b>
<b>a</b> Forested land . . . . .	Acre	<b>25</b>	<b>\$87.65</b>	<b>\$ 2,191.20</b>
<b>b</b> Other unimproved land . . . . .	Acre			
<b>c</b> Improved land (describe) ▶ .....	Acre			
<b>d</b> Merchantable timber. Estimate the quantity of merchantable timber present on the acquisition date (see Regulations section 1.611-3(e)). Details of the timber estimate, made for purposes of the acquisition, should be available if your return is examined.	<b>MBF</b>			
	<b>MBF</b>	<b>54.25</b>	<b>\$177.92</b>	<b>\$ 9,652.41</b>
	<b>MBF</b>			
<b>e</b> Premerchantable timber. Make an allocation here only if it is a factor in the total cost or value of the land.	<b>Acre</b>			
<b>f</b> Improvements (list separately) ..... ..... ..... .....				
<b>g</b> Mineral rights . . . . .				
<b>h</b> Total cost or other basis (same amount as line 8). Add lines 9a through 9g . . . . .				<b>\$11,843.61</b>

Figure 5. Form T, Forest Activity Schedule, for Mr. and Mrs. Smith's 25-Acre Merchantable, High-Quality White and Red Oaks.

In 2004 the Smiths used EQIP funding to conduct a timber stand improvement on the 20 acres of young pre-merchantable white oak. Their objective was to focus growth on the highest quality crop trees for future timber production. Would this have any impact on the basis of the 20-acre pre-merchantable white oak? The 20 acres of pre-merchantable white oak has an original basis of \$1,130.81 as determined by the appraisal and retroactive timber appraisal (shown in Table 4). Although the Smiths used USDA NRCS EQIP funding for the timber stand improvement, they are not allowed to exclude any portion of this payment under Section 126 because expenses related to management of the timber, such as timber stand improvement, can be deducted in the year in which they occur. Management costs for investors include, but are not limited to, all operating expenses (e.g., timber stand improvement), investment advice (e.g., forestry consultants), and tax preparation services. Management costs do not include property taxes, other deductible taxes, and any interest payments. For an investor to deduct management costs, they must be added to all “miscellaneous itemized deductions” and that category must exceed 2 percent of the adjusted gross income of the taxpayer. If the total amount of “miscellaneous itemized deductions” does not exceed the 2 percent minimum, the taxpayer will be required to take the standard deduction and those miscellaneous itemized expenses related to timber management may be added to the timber basis.

For the purpose of this scenario, assume that the Smiths were able to deduct the cost of the timber stand improvement from their 2004 taxes. As a result, there is no adjustment made to the basis for this property. The basis in the 20 acres of pre-merchantable white oak is still the original basis of \$1,131 shown in Table 4.

In 2009, an unprecedented wind storm laid the trees over on the 25-acre site with high-quality white and red oaks and the 20 acres of pre-merchantable white oak. How much can the Smiths deduct as a casualty loss on these two tracts? To determine the potential casualty loss deduction, Mr. and Mrs. Smith need to get an estimate of the FMV before and the FMV after the wind storm. Mr. and Mrs. Smith hire a professional forester to estimate the value of the timber before and after the windstorm. According to the professional forester, the merchantable, high-quality white and red oak timber had a FMV of \$9,097 just prior to the windstorm and the 20 acres of pre-merchantable white oak had a FMV of \$1,485 just prior to the windstorm. Following the windstorm, the high-quality white and red oak timber had a FMV of \$7,500 and the pre-merchantable white oak had a FMV of \$500. Based on this information, the Smiths may deduct \$1,597 ( $\$9,097 - \$7,500$ ) as a casualty loss on their Oak Hills high quality white and red oak timber, and \$985 ( $\$1,485 - \$500$ ) as a casualty loss on their 20 acres of pre-merchantable white oak. Figure 6, page 11, shows form 4684 completed for Mr. and Mrs. Smith. If Mr. and Mrs. Smith are in the 25 percent tax bracket, this deduction of \$2,582 will only net a \$645 tax savings. If the professional

forester or appraisal fees are greater than this amount the Smiths may want to consider whether or not the expense is worth the deduction.

## Conclusion

Estimating a casualty loss for timber can be a difficult process, especially if the landowner has never established a basis. In some cases, the process for establishing the retroactive basis, FMV prior to the casualty event, and FMV after the casualty event may cost the landowner more than the possible deduction. Similarly, for many areas in Missouri, where timber values are often under-represented in the real estate market, the basis in the timber may be so low that the landowner will actually show a substantial capital gain if a salvage harvest occurs. The fictitious scenarios developed in this paper were designed to simplistically show the process for calculating casualty losses or gains and the forms used to report this to the IRS.

There are many other scenarios that were not discussed that would have an impact on the forms used and the amount of the deduction.

The purpose for which the property is held will have a major impact on the amount of the deduction. For example, timber held as part of an income producing property, such as an investment, is subject to the 2 percent of adjusted gross income limit for “miscellaneous itemized deductions” as discussed earlier, whereas, timber held as a business, such as a farm, is able to fully deduct casualty losses. Property held for personal use is subject to an additional 10 percent adjusted gross income limitation and the smaller of the adjusted basis and the decrease in FMV is further adjusted by a \$100 reduction.

Recent legislation changed some of the tax rules pertaining to losses resulting from federally declared disasters. The new law removes the 10 percent of adjusted gross income limitation for net disaster losses and allows individuals to claim the net disaster losses even if they do not itemize their deductions. The new law is effective for disasters declared in taxable years beginning after Dec. 31, 2007, and occurring before Jan. 1, 2010. The new law also increases to \$500 (effective for disasters occurring in 2009) the amount by which all individuals must reduce their casualty and theft losses for personal-use property. This \$500 reduction for losses of personal-use property applies to each casualty or theft event and applies to deductions taken in 2009<sup>ix</sup>.

Finally, timber held in a business in which you are a passive participant, is subject to passive loss rules. For more information regarding casualty losses in timber, contact your local tax accountant or see the National Timber Tax Web site at [www.timbertax.org](http://www.timbertax.org)

Name(s) shown on tax return. Do not enter name and identifying number if shown on other side.

Identifying number

Mr. and Mrs. Smith

XXX-XX-XXXX

**SECTION B—Business and Income-Producing Property**

**Part I Casualty or Theft Gain or Loss** (Use a separate Part I for each casualty or theft.)

25 Description of properties (show type, location, and date acquired for each property). Use a separate line for each property lost or damaged from the same casualty or theft.

Property A **Oak Hills (merchantable, high quality white and red oaks) 25 Acre tract**

Property B **Young Oaks (pre-merchantable white oak) 20 Acre tract**

Property C

Property D

	Properties							
	A		B		C		D	
26 Cost or adjusted basis of each property . . . . .	26	\$ 9	652	\$ 1	131			
27 Insurance or other reimbursement (whether or not you filed a claim). See the instructions for line 3 . . . . .	27							
<b>Note:</b> If line 26 is more than line 27, skip line 28.								
28 Gain from casualty or theft. If line 27 is more than line 26, enter the difference here and on line 35 or line 40, column (c), except as provided in the instructions for line 39. Also, skip lines 29 through 33 for that column. See the instructions for line 4 if line 27 includes insurance or other reimbursement you did not claim, or you received payment for your loss in a later tax year. . . . .	28							
29 Fair market value before casualty or theft . . . . .	29	\$ 9	907	\$ 1	485			
30 Fair market value after casualty or theft. . . . .	30	\$ 7	500	\$ 500				
31 Subtract line 30 from line 29 . . . . .	31	\$ 1	597	\$ 985				
32 Enter the smaller of line 26 or line 31 . . . . .	32	\$ 1	597	\$ 985				
<b>Note:</b> If the property was totally destroyed by casualty or lost from theft, enter on line 32 the amount from line 26.								
33 Subtract line 27 from line 32. If zero or less, enter -0- . . . . .	33	\$ 1	597	\$ 985				
34 Casualty or theft loss. Add the amounts on line 33. Enter the total here and on line 35 or line 40 (see instructions) . . . . .	34							\$ 2 582

**Part II Summary of Gains and Losses** (from separate Parts I)

(a) Identify casualty or theft	(b) Losses from casualties or thefts			(c) Gains from casualties or thefts includible in income
	(i) Trade, business, rental or royalty property	(ii) Income-producing and employee property		
<b>Casualty or Theft of Property Held One Year or Less</b>				
35				
36 Totals. Add the amounts on line 35 . . . . .	36			
37 Combine line 36, columns (b)(i) and (c). Enter the net gain or (loss) here and on Form 4797, line 14. If Form 4797 is not otherwise required, see instructions . . . . .	37			
38 Enter the amount from line 36, column (b)(ii) here. Individuals, enter the amount from income-producing property on Schedule A (Form 1040), line 28, or Form 1040NR, Schedule A, line 16, and enter the amount from property used as an employee on Schedule A (Form 1040), line 23, or Form 1040NR, Schedule A, line 11. Estates and trusts, partnerships, and S corporations, see instructions . . . . .	38			

<b>Casualty or Theft of Property Held More Than One Year</b>				
39 Casualty or theft gains from Form 4797, line 32 . . . . .	39			
40 <b>Timber Losses</b>			\$2582	00
41 Total losses. Add amounts on line 40, columns (b)(i) and (b)(ii) . . . . .	41		\$2582	00
42 Total gains. Add lines 39 and 40, column (c) . . . . .	42			
43 Add amounts on line 41, columns (b)(i) and (b)(ii) . . . . .	43			\$ 2 582
44 If the loss on line 43 is more than the gain on line 42:				
a Combine line 41, column (b)(i) and line 42, and enter the net gain or (loss) here. Partnerships (except electing large partnerships) and S corporations, see the note below. All others, enter this amount on Form 4797, line 14. If Form 4797 is not otherwise required, see instructions . . . . .	44a			
b Enter the amount from line 41, column (b)(ii) here. Individuals, enter the amount from income-producing property on Schedule A (Form 1040), line 28, or Form 1040NR, Schedule A, line 16, and enter the amount from property used as an employee on Schedule A (Form 1040), line 23, or Form 1040NR, Schedule A, line 11. Estates and trusts, enter on the "Other deductions" line of your tax return. Partnerships (except electing large partnerships) and S corporations, see the note below. Electing large partnerships, enter on Form 1065-B, Part II, line 11 . . . . .	44b		\$ 2	582
45 If the loss on line 43 is less than or equal to the gain on line 42, combine lines 42 and 43 and enter here. Partnerships (except electing large partnerships), see the note below. All others, enter this amount on Form 4797, line 3 . . . . .	45			
<b>Note:</b> Partnerships, enter the amount from line 44a, 44b, or line 45 on Form 1065, Schedule K, line 11. S corporations, enter the amount from line 44a or 44b on Form 1120S, Schedule K, line 10.				

Figure 6. Form 4684, Section B, Part I and Part II for Mr. and Mrs. Smith's Casualty Loss.

<sup>i</sup>Progressive damage due to insect or disease may be deducted as a non-casualty business loss. See Revenue Ruling, 87FED ¶6582, Losses: Timber: Insect damage.--, Revenue Ruling 87-59, 1987-2 CB 59, (Jan. 01, 1987)

<sup>ii</sup>For more information on Retroactive Basis Determination, see IRS Timber Casualty Loss Audit Techniques Guide.

<sup>iii</sup>For more information on Basis, see IRS Publication 551 or Determining Timber Cost Basis: MU Guide, MU Extension publication, G05055, by J.P. Dwyer and S. Jones.

<sup>iv</sup>If the damage necessitates site preparation and reforestation, the cost can be treated as a section 194 reforestation costs. These are deductible – up to \$10,000 per qualifying timber property per year and the remainder can be amortized.

<sup>v</sup>This is a common scenario in Missouri, where the highest and best use of the property is considered to be the cropland and the timberland is considered “woods and waste” by the appraiser.

<sup>vi</sup>See *Forest Landowners' Guide to the Federal Income Tax*, USDA/FS, Agriculture Handbook No. 718, Chapter 8 for more details on casualty loss and salvage sales.

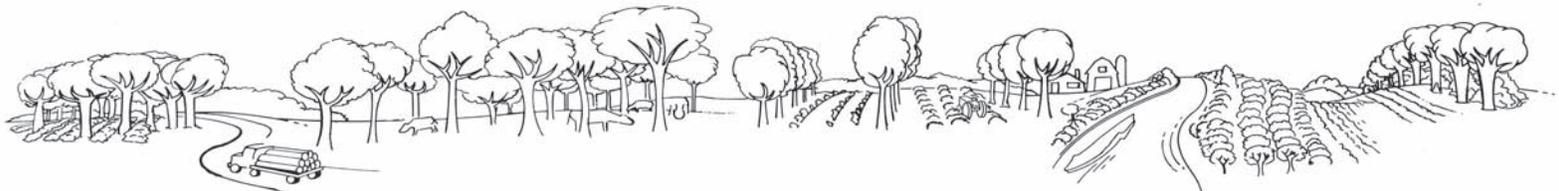
<sup>vii</sup>It is important to mention the Section 126, Cost-Share Exclusion provision of the IRC. For more information about this portion of the tax code see Tax Considerations for the Establishment of Agroforestry; *Agroforestry in Action*, AF 1004-2005, by L.D. Godsey.

<sup>viii</sup>For more information on the Section 194, Reforestation Deduction and Amortization, see Tax Considerations for the Establishment of Agroforestry; *Agroforestry in Action*, AF 1004-2005, by L.D. Godsey.

<sup>ix</sup>For more information on the new legislation regarding disasters, see IRS Publication 4492-B Information for Affected Taxpayers in the Midwestern Disaster Areas.

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