



# 2017 Cropland, Pastureland and Timberland Valuation for Property Tax Purposes



Arkansas Assessment Coordination Department

October 15, 2016



**Bear Chaney  
Director**

**STATE OF ARKANSAS**  
**ASSESSMENT COORDINATION DEPARTMENT**

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October 15, 2016

To: The Honorable David L. Branscum  
To: The Honorable Bill Sample

This report is presented pursuant to A.C.A 26-26-407 (4) which requires that ACD report any changes to the agricultural use valuation formula for property tax purposes to Legislative Council by October 15<sup>th</sup> of each year.

Contained within this report are the guidelines used by ACD in its duties, the calculations used in determining the values, and the statistical information used in the calculations. These values will be used by counties completing their reappraisal cycle in 2017.

No changes were made in the formulas used in these calculations this year.

If you have any questions about any part of A.C.A 26-26-407 (4) or any part of the Agricultural Use Valuation process please feel free to contact me.

Sincerely,

Robert McGee  
Division Administrator  
Arkansas Assessment Coordination Department  
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# Guidelines For The Mass Appraisal Of Cropland, Timberland, and Pastureland In The State Of Arkansas

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Developed By The State Of Arkansas Assessment Coordination Department 1996 in compliance with Arkansas Code 26-26-407

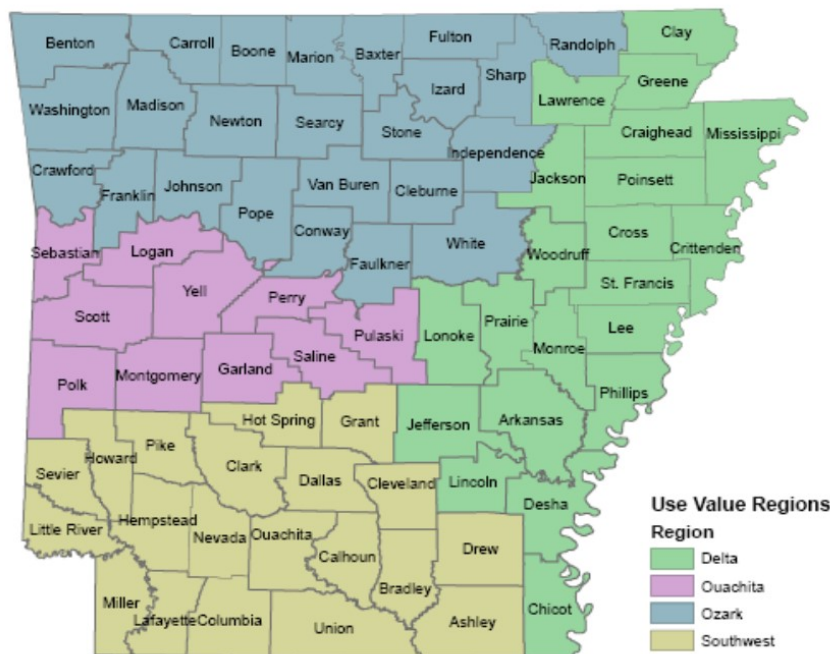
Revised 2016

## Overview

All agricultural lands in the state including cropland, pastureland, and timberland are given special classification by the state constitution (Amendment 59). Such land is to be valued based on its use. It is not based on its market value. This use valuation, as it is called, is designed to protect and preserve such land. The state in rendering this classification recognizes the importance of crops and farming, the production of livestock, and a managed forest for the betterment of all the people of the state.

The Agricultural Land mass appraisal program launched in 1981 developed seventy-five individual county land values based on published information by the USDA National Agricultural Statistics Service (NASS-USDA) and the Natural Resource and Conservation Service (NRCS).

In an effort to eliminate some of the variables and inconsistencies, in 1996 the introduction of Regional Land Values for the state of Arkansas was implemented. The land regions are based on those set by the U.S. Forest Service. There are four regions:



In 2007, clarifying language was added to statute as to how often the Assessment Coordination Department will calculate agricultural values (annually), that counties must use those values at the end of their reappraisal cycle, basic parameters for the formulas used to calculate the capitalization rate used, and added oversight by requiring a report be filed annually with Legislative Council.

## Statute Highlights

The following consists of highlights from Arkansas Code 26-26-407. Please see the full statute for complete information regarding agricultural valuation.

(b)(1)(A) Agricultural land, pasture land, and timber land valuation shall be based on the productivity of the agricultural land, pasture land, or timber land soil.

(B) Agricultural land, pasture land, and timber land guidelines shall be developed based on the typical or most probable use of the soils for agricultural land, pasture land, and timber land in the region.

## **Statute Highlights cont.**

(f)(1) In devising and developing methods of assessing and levying the ad valorem property tax on real property, the Assessment Coordination Department shall annually develop and publish valuation tables and other data which shall be used by county Assessors for assessing lands qualifying under the provisions of this subchapter.

(2)(A) Effective for assessment years beginning January 1, 2008, and every year thereafter, the Assessment Coordination Department shall update the valuation tables for assessing lands qualifying as agricultural land, pasture land, and timber land in time for counties to use the updated tables when they finish their countywide appraisals.

(B) Beginning January 1, 2008, when there is a countywide reappraisal, a county shall assess agricultural land, pasture land, and timber land based upon the updated land values in the valuation tables issued for the assessment year.

(3)(A) Effective for assessment years beginning January 1, 2008, the Assessment Coordination Department by rule shall develop appropriate formulas reflecting the productivity valuation of the land based upon income capability attributable to agricultural land, pasture land, and timber land soils.

(B) Beginning January 1, 2008, and every year thereafter, the Assessment Coordination Department shall develop and calculate capitalization rates by using appropriate long-term federal security rates, risk rates, management rates, and other appropriate financial rates.

(C) However, the capitalization rate developed under subdivision (f) (3) (B) of this section shall not be less than eight percent (8%) nor more than twelve percent (12%).

(4) By October 15 of each year, the Assessment Coordination Department shall report to the Legislative Council any changes to any part of the formula used to determine the value or the capitalization rate.

## **Soils**

The Assessment Coordination Department utilizes the NRCS Soil Survey for each county in the state of Arkansas in its valuation process and for its soil classification. The Soil Survey contains the Land Capability Classification System. This system measures the limitations of soils using eight classes with subclasses. The soil groupings are based on the NRCS Class I being the least limited and VIII being the most restrictive. The sub class describes the type of limitation be it W-water, E-erosion, and S-shallow or unstable soils. NRCS has published a soil survey for each county in Arkansas. These are available online at <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

Within these surveys each soil is described and is designated a capability class, and a subclass. The survey also provides productivity rates for crop soils and pasture soils. It also provides growth indices for timber soils . The NRCS also produces a soil map for each county which is utilized in the valuation process.

Below is a brief summary of each of the Land Capability Classification System groupings. Please see the Web Soil Survey for a complete description.

ACD Numbers and NRCS LCC Interpretations (The ACD numbers are provided for easy conversion of the LCC scientific classification nomenclature.)

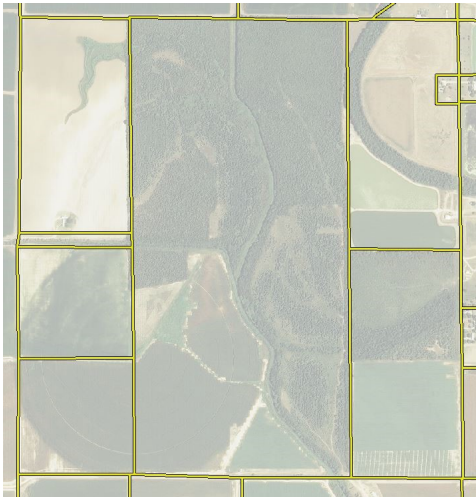
ACD#	LAND CAPABILITY CLASSIFICATION
1	I- Soils have few limitations that restrict use.
2	IIw - Soils have moderate water limitations that reduce the choice of plants or require moderate conservation practices.
3	III <sub>s</sub> - Soils are very shallow and suffer from severe limitations that reduce the choice of plants or that require special conservation practices, or both.
4	III <sub>w</sub> - Soils have severe water limitations that reduce the choice of plants or that require special conservation practices, or both.
5	II <sub>s</sub> - Soils are shallow and have moderate limitations that reduce the choice of plants or require moderate conservation practices.
6	IV <sub>s</sub> - Soils are shallow and have severe limitations that reduce the choice of plants or that require careful management, or both.
7	IV <sub>w</sub> - Soils have severe water limitations that reduce the choice of plants or that require very careful management, or both.
8	V <sub>w</sub> - Soils are not likely to erode, but have water limitations, impractical to remove and limits the use.
9	VI <sub>s</sub> - Soils have severe shallow limitations that make them generally unsuitable for cultivation.
10	VI <sub>w</sub> - Soils have severe water limitations that make them generally unsuitable for cultivation.
11	VII <sub>s</sub> - Soils are shallow and have very severe limitations that make them unsuitable for cultivation.
12	II <sub>e</sub> - Soils have moderate limitations to erosion that reduces the choice of plants or that require moderate conservation practices.
13	III <sub>e</sub> - Soils have severe limitations to erosion that reduces the choice of plants or that require special conservation practices, or both.
14	IV <sub>e</sub> - Soils have very severe limitations to erosion that reduces the choice of plants or that require very careful management, or both.
15	VI <sub>e</sub> - Soils have very severe limitations to erosion that make them generally unsuitable for cultivation.
16	VII <sub>e</sub> - Soils have very severe limitations to erosion that make them unsuitable for cultivation.
17	VIII- (ROCK OUTCROPS ECT) - Soils and miscellaneous areas that have limitations that nearly preclude their use for commercial crop production.
18	NO CLASS OR MISC. LAND

LETTERS INDICATE LIMITATIONS (PROBLEMS) ASSOCIATED WITH THOSE SOILS.

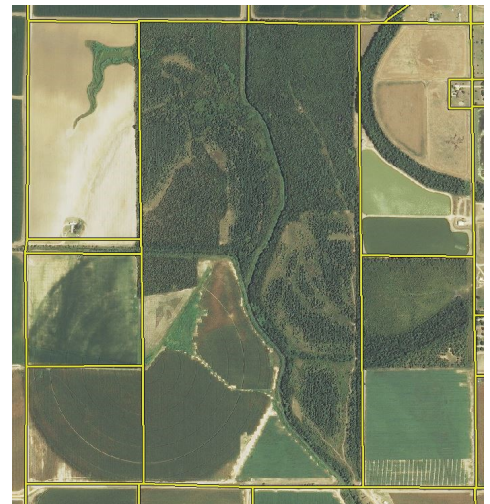
w = WATER PROBLEMS (flooding), e = EROSION PROBLEMS, s = SHALLOW SOILS (limited root zone, or stony soils)

## Determining Use

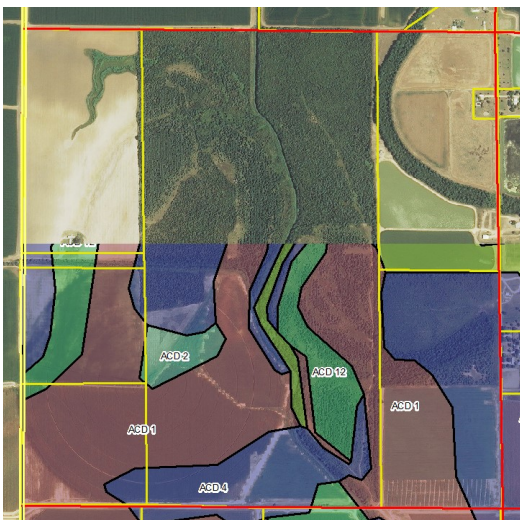
The county or its contractor uses many tools in its valuation process. First it determines the use of the property by identifying and visiting the property. A visual inspection helps determine whether it is crop, pasture, timber or as in many cases a mix of these uses. Sometimes aerial photography and/ or satellite imagery is used for difficult or unusual terrain.



Identifying the property



Determining Use



Applying the soil map to the property to calculate the acreage of each soil by each use on each piece of property



An example of a 40 acre parcel.

Acres	ACD#	Use
20	4	Pasture
10	6	Timber
5	6	Pasture
5	11	Timber

### Valuation

According to code 26-26-407 there is a land value developed for each land capability class. In some cases values have been filled into some classes where there has been agricultural activity but productivity data is non-documented. Arkansas Code 26-26-407 clearly indicates that the use valuation of land should be used for agricultural lands. This method is otherwise known as the income approach to value. The basic formula for this is:

$$\text{Income} - \text{Cost} = \text{Net Income} / \text{Capitalization Rate} = \text{Land Value}$$

Each of our categories, Crop, Pasture, and Timber are calculated using their own representative productive output. Crop uses soybeans which can be grown in all four agricultural regions as its base. Pasture uses a mixture of warm and cool season grasses that are traditionally grown for grazing in all four regions as its base. Timber uses a mixture of pine and hardwoods as its base. Each soil has a bushel, AUM (animal unit per month), or a board foot per year productive capability.

In determining values we use ten year rolling averages of crop prices, rental rates, costs, stumpage pricing, and financial securities to help level out large swings that could be the result of a single year of high or low numbers due to outside influences. All values are calculated with a one year delay due to the need for data that is calculated by various federal agencies and industry resources that is not released until the third quarter of each year. This means that the 2017 values are based on data that was captured through the end of 2015, compiled and then published in the third quarter of 2016, applied to our formulas in 2016 and released for use in the reappraisal cycles ending in 2017.

The capitalization rate, or cap rate, is the rate at which you discount future income to determine its present value. Another way of looking at it is the capitalization rate expresses what percentage rate a property's net operating income is to its value.

### Valuation—Crop

Crop Income is based on a ten year market price average for soybeans which for this report was \$10.54. This amount is multiplied by the NRCS average bushel per acre of soybeans for each soil type. To adjust for operating costs a 25/75 rental rate split is assumed with the 25 percent applied as net income. It is then divided by the capitalization rate.

	AVERAGE SOYBEAN BUSHEL PER ACRE	10 YEAR AVERAGE OF PRICES RECEIVED BY FARMERS	SUM	75/25 SPLIT	APPLIED CAPITALIZATION RATE	ROUNDED TO THE NEAREST \$5
					9.38%	
ACD 1	39	\$10.54	\$411.06	\$102.77	\$1,095.58	<b>\$1,095</b>
ACD 2	35	\$10.54	\$368.90	\$92.23	\$983.21	<b>\$985</b>
ACD 3	18	\$10.54	\$189.72	\$47.43	\$505.65	<b>\$505</b>

### Valuation—Pasture

Pasture Income is based on AUM. Animal Unit Months are a measure of forage productivity in the soil surveys. The value of one animal unit month was developed by taking the state average AUM of 6.5 and dividing it by the 10 yr. Pasture Rent Average \$18.20. This leads to a \$2.82 per AUM value statewide which is the equivalent of the per bushel price for soybeans. The average AUM for each soil class is multiplied by price per AUM and then divided by the capitalization rate.

	AUM	AVG \$ PER AUM	TOTAL	APPLIED CAPITALIZATION RATE	ROUNDED TO NEAREST \$5
				8.38%	
ACD 1	9.9	\$2.82	\$27.92	\$333.15	<b>\$335</b>
ACD 2	8.4	\$2.82	\$23.69	\$282.67	<b>\$285</b>
ACD 3	5.2	\$2.82	\$14.66	\$174.99	<b>\$175</b>

### Valuation—Timber

Because of the thirty to forty year growth cycle of marketable timber and the variable growth volumes for each year a discount cash flow model was used to best represent the use value. This model takes into consideration the startup capital for tree planting, herbicidal and fire treatments, as well as income produced through various thinning's of the growth cycle. This results in culmination of information brought back to the present worth of the site.

The timber productivity of each soil is measured by the soils indicator species and site index, as assigned by The Natural Resource and Conservation Service (NRCS). Utilizing the indicator species and the site index as the determining factor for productivity, a discount cash flow determines value for:

Soils with a Site index greater than 90 is Very Productive = Pine High Site

Soils with a Site index of 89 to 70 is Productive = Medium Pine Site

Soils with a Site index of 69 to 50 is Marginal = Low Pine Site

Soils with a Site index 49 and below is Unproductive = Min. Land Value

All Hardwood lands = Hardwood Site Value

The basic formula for Timber is:

$$\begin{array}{l} \text{State average} \\ \text{prices on board} \\ \text{and pulp} \end{array} \times \begin{array}{l} \text{Harvest vol-} \\ \text{umes by soil} \\ \text{type and spe-} \\ \text{cies and board} \\ \text{and or pulp} \end{array} = \begin{array}{l} \text{Income from} \\ \text{thinning and} \\ \text{final harvests} \end{array} - \begin{array}{l} \text{Expenses from} \\ \text{planting thin-} \\ \text{ning etc.} \end{array} / \begin{array}{l} \text{Capitalization} \\ \text{rate} \end{array} = \text{Value}$$

The soils value is then determined by multiplying total acres to determine total value and then calculating a weighted value by soil type for each region. For information regarding the discount cash flow formula for timber land please contact the Assessment Coordination Department, <http://www.arkansas.gov/acd>.

Please remember that the total values presented are then multiplied by the Assessment Rate (20%) as prescribed by law for all property in the state. That determines its Assessed Value. It then needs to be multiplied by your local millage rate to determine a tax amount. Please contact your local county Assessor for more information on this.

## FAQ's

### Fire Protection Tax

There is levied on all timberlands in this state an annual tax of twenty cents (20¢) per acre to be collected in the manner provided in under Arkansas Code 26-61-103 for deposit into the State Treasury for credit to the State Forestry Fund as special revenues to be used for the maintenance, operation, and improvement of the Arkansas Forestry Commission in its statewide program for the detection, prevention, and suppression of forest fires.

**If a taxpayer's agricultural land, pasture land or timber land goes up in value as a result of a reappraisal are his taxes based upon 20% of the total value of such property, including the increase?** No, such land, by Amd. 79 definition, could not qualify as homestead property, and therefore any increase in assessed value is limited (capped) to not increase annually more than ten percent (10%) of the assessed value of the property for the previous year, but it shall increase by an additional ten percent (10%) each year until it reaches that full assessed value, Ark. Constitution Amd. 79 Sec. 1(b)(1). This provision does not apply to newly discovered real property, new construction, or substantial improvement to real property, Ark. Constitution Amd. 79 Sec. 1(b)(2).

**Does the assessed value of a taxpayers agricultural land, pasture land or timber land cease to increase (freeze) over and above the amount it was immediately before he purchased the property or became disabled or sixty-five (65) years of age?** No, by Amd. 79 definition, agricultural land, pasture land or timber land is not homestead property and therefore the freeze does not apply, Ark. Constitution Amd. 79 Sec. 1(d)(1)(A).

**How do we value WRP – CRP lands?** WRP and CRP lands are classified as agricultural land for property tax purposes and receive no other consideration in value.

**What jurisdiction do the BOE and the county court have to hear appeals of taxpayers who disagree with the county assessor as to the assessment on their agricultural land, pasture land, or timber land?** The BOE may reclassify land upon proof of change in use of the land or upon proof that the land is not eligible for classification under this section. Neither the BOE nor the county court may change the value of such land because the value is established by the ACD, ACA 16-26-407. In almost all cases any dispute over use can be resolved by contacting your county Assessor.

DELTA

**CROP**

	<b>AVERAGE SOYBEAN BUSHEL PER ACRE</b>	<b>10 YEAR AVERAGE OF PRICES RECEIVED BY FARMERS</b>	<b>SUM</b>	<b>75/25 SPLIT</b>	<b>APPLIED CAPITALI- ZATION RATE</b>	<b>ROUNDED TO THE NEAREST \$5</b>	<b>OLD RATE ROUNDED TO THE NEAREST \$5</b>	<b>DIFF</b>	<b>% DIFF</b>
					9.38%				
ACD 1	39	\$10.54	\$411.06	\$102.77	\$1,095.58	<b>\$1,095</b>	<b>\$1,040</b>	<b>\$55</b>	5%
ACD 2	35	\$10.54	\$368.90	\$92.23	\$983.21	<b>\$985</b>	<b>\$935</b>	<b>\$50</b>	5%
ACD 3	18	\$10.54	\$189.72	\$47.43	\$505.65	<b>\$505</b>	<b>\$480</b>	<b>\$25</b>	5%
ACD 4	32	\$10.54	\$337.28	\$84.32	\$898.93	<b>\$900</b>	<b>\$855</b>	<b>\$45</b>	5%
ACD 5	30	\$10.54	\$316.20	\$79.05	\$842.75	<b>\$845</b>	<b>\$800</b>	<b>\$45</b>	6%
ACD 6	14	\$10.54	\$147.56	\$36.89	\$393.28	<b>\$395</b>	<b>\$375</b>	<b>\$20</b>	5%
ACD 7	29	\$10.54	\$305.66	\$76.42	\$814.66	<b>\$815</b>	<b>\$775</b>	<b>\$40</b>	5%
ACD 8	29	\$10.54	\$305.66	\$76.42	\$814.66	<b>\$815</b>	<b>\$775</b>	<b>\$40</b>	5%
ACD 9	14	\$10.54	\$147.56	\$36.89	\$393.28	<b>\$395</b>	<b>\$375</b>	<b>\$20</b>	5%
ACD 10	29	\$10.54	\$305.66	\$76.42	\$814.66	<b>\$815</b>	<b>\$775</b>	<b>\$40</b>	5%
ACD 11	14	\$10.54	\$147.56	\$36.89	\$393.28	<b>\$395</b>	<b>\$375</b>	<b>\$20</b>	5%
ACD 12	31	\$10.54	\$326.74	\$81.69	\$870.84	<b>\$870</b>	<b>\$825</b>	<b>\$45</b>	5%
ACD 13	24	\$10.54	\$252.96	\$63.24	\$674.20	<b>\$675</b>	<b>\$640</b>	<b>\$35</b>	5%
ACD 14	22	\$10.54	\$231.88	\$57.97	\$618.02	<b>\$620</b>	<b>\$585</b>	<b>\$35</b>	6%
ACD 15						<b>\$300</b>	<b>\$285</b>	<b>\$15</b>	5%
ACD 16						<b>\$245</b>	<b>\$235</b>	<b>\$10</b>	4%
ACD 17						<b>\$175</b>	<b>\$170</b>	<b>\$5</b>	3%
ACD 18						<b>\$120</b>	<b>\$115</b>	<b>\$5</b>	4%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE  
 USDA - ARKANSAS AGRICULTURAL STATISTICS

DELTA

PASTURE

	AUM	AVG \$ PER AUM	TOTAL	APPLIED CAPITAL- IZATION RATE 8.38%	ROUNDED TO NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
ACD 1	9.9	\$2.82	\$27.92	\$333.15	<b>\$335</b>	\$325	<b>\$10</b>	3%
ACD 2	8.4	\$2.82	\$23.69	\$282.67	<b>\$285</b>	\$275	<b>\$10</b>	4%
ACD 3	5.2	\$2.82	\$14.66	\$174.99	<b>\$175</b>	\$170	<b>\$5</b>	3%
ACD 4	7.4	\$2.82	\$20.87	\$249.02	<b>\$250</b>	\$240	<b>\$10</b>	4%
ACD 5	7.1	\$2.82	\$20.02	\$238.93	<b>\$240</b>	\$230	<b>\$10</b>	4%
ACD 6	4.1	\$2.82	\$11.56	\$137.97	<b>\$140</b>	\$135	<b>\$5</b>	4%
ACD 7	6.7	\$2.82	\$18.89	\$225.47	<b>\$225</b>	\$220	<b>\$5</b>	2%
ACD 8	5.5	\$2.82	\$15.51	\$185.08	<b>\$185</b>	\$180	<b>\$5</b>	3%
ACD 9	4	\$2.82	\$11.28	\$134.61	<b>\$135</b>	\$130	<b>\$5</b>	4%
ACD 10	5.5	\$2.82	\$15.51	\$185.08	<b>\$185</b>	\$180	<b>\$5</b>	3%
ACD 11	3.5	\$2.82	\$9.87	\$117.78	<b>\$120</b>	\$115	<b>\$5</b>	4%
ACD 12	8.8	\$2.82	\$24.82	\$296.13	<b>\$295</b>	\$290	<b>\$5</b>	2%
ACD 13	7.7	\$2.82	\$21.71	\$259.12	<b>\$260</b>	\$250	<b>\$10</b>	4%
ACD 14	6.2	\$2.82	\$17.48	\$208.64	<b>\$210</b>	\$205	<b>\$5</b>	2%
ACD 15	4.7	\$2.82	\$13.25	\$158.16	<b>\$160</b>	\$155	<b>\$5</b>	3%
ACD 16	4.7	\$2.82	\$13.25	\$158.16	<b>\$160</b>	\$155	<b>\$5</b>	3%
ACD 17	4.7	\$2.82	\$13.25	\$158.16	<b>\$160</b>	\$155	<b>\$5</b>	3%
ACD 18					<b>\$75</b>	\$75	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE  
 USDA - ARKANSAS AGRICULTURAL STATISTICS

DELTA PINEHIGH SITE

**Estimated Timberland Value for Timber Production in Arkansas (High-Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 30 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$ 174	No	\$0	\$174	\$0	\$1,743	\$1,917
3	Spray	\$ 52	Yes	\$18	\$34	\$140	\$260	\$136
8	PCT	\$ 89	Yes	\$31	\$58	\$150	\$278	\$155
18	Fert.	\$ 83	Yes	\$29	\$54	\$47	\$87	\$65
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$398	-	\$79	\$320	\$337	\$2,369	\$2,273
Annual Expenses:								
Adminstration/management.:		\$10	Yes	\$4	\$7	\$32	\$60	\$31
Subtotal (30 yrs.):		\$300	"	\$105	\$195	\$334	\$619	\$376
Total:		\$698	-	\$184	\$515	\$671	\$2,988	\$2,649
**Interest rate used in computations is:			8.00%					

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax @ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
16	9.21 (Cords)	\$ 23	\$214	(\$15)	-	\$199	-	-
23	3.78 (MBF Doyle)	\$ 285	\$1,077	(\$75)	-	\$1,001	\$256	\$380
					(\$377)	\$624	\$469	\$1,093
30	16.45 (MBF Doyle)	\$ 285	\$4,681	(\$328)	-	\$4,354	-	-
					(\$1,499)	\$2,855	\$0	\$2,855
Total:		-	\$5,972	(\$418)	(\$1,951)	\$2,979	\$725	\$4,328

<sup>1</sup> Less Site Prep/Plant Expense and adjusted for fed. tax deduction.

DELTA PINEHIGHSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$4,328
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$2,649)
3. Net income before property tax:	\$1,680
4. Present value of net income before property tax:	\$168
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.55)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.01)
Total property tax payments per harvest cycle:	(\$30)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$96
6. Land value after property tax (adj. for income tax deduction):	<b>\$155</b>

**Step 4 - Tax Burden on High Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$46	-	\$30	\$96	\$126
Subtotal:	\$46	-	\$30	\$96	\$126
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$418	-	\$272	-	\$272
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,951	\$1,951	-	\$1,951
Subtotal:	\$418	\$1,951	\$2,222	-	\$2,222
Totals:	\$465	\$1,951	\$2,253	\$96	\$2,349
Tax burden as percent of gross revenues:	7.8%	32.7%	37.7%	1.6%	39.3%

DELTA PINEMEDSITE

**Estimated Timberland Value for Timber Production in Arkansas (Medium-Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 32 Years):**

<u>Out-of-Pocket Expenses:</u>							
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant		No	\$0	\$0	\$0	\$0
3	Spray		Yes	\$0	\$0	\$0	\$0
8	PCT		Yes	\$0	\$0	\$0	\$0
19	Fert.		Yes	\$0	\$0	\$0	\$0
26	Fert.	-	Yes	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0
Annual Expenses:							
Adminstration/management.:		\$8	Yes	\$3	\$5	\$31	\$29
Subtotal (32 yrs.):		\$256	"	\$90	\$166	\$328	\$358
Total:		\$256	-	\$90	\$166	\$328	\$358
**Interest rate used in computations is:			8.00%				

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
18	8.03	\$23.23	\$186	(\$13)	-	\$173	-	-
	(Cords)				(\$65)	\$108	\$223	\$332
32	13.59	\$284.61	\$3,868	(\$271)	-	\$3,597	-	-
	(MBF Doyle)				(\$1,354)	\$2,243	\$0	\$2,243
Total:		-	\$4,055	(\$284)	(\$1,419)	\$2,352	\$223	\$2,575

<sup>1</sup> Less Site Prep/Plant Expense and adjusted for fed. tax deduction.



DELTA PINEMEDSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,575
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before property tax:	\$2,217
4. Present value of net income before property tax:	\$186
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.72)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.12)
Total property tax payments per harvest cycle:	(\$36)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$131
6. Land value after property tax (adj. for income tax deduction):	<b>\$172</b>

**Step 4 - Tax Burden on Medium Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$55	-	\$36	\$131	\$167
Subtotal:	\$55	-	\$36	\$131	\$167
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$284	-	\$184	-	\$184
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,419	\$1,419	-	\$1,419
Subtotal:	\$284	\$1,419	\$1,604	-	\$1,604
Totals:	\$339	\$1,419	\$1,639	\$131	\$1,770
Tax burden as percent of gross revenues:	8.4%	35.0%	40.4%	3.2%	43.7%

DELTA PINELOWSITE

**Estimated Timberland Value for Timber Production in Arkansas (Low Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 34 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$0	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$0	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$0	Yes	\$0	\$0	\$0	\$0	\$0
19	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs.):		\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
		\$23	\$0	\$0	-	\$0	-	-
	(Cords)				\$0	\$0	\$0	\$0
34	11.16	\$285	\$3,176	(\$222)		\$2,953	-	-
	(MBF Doyle)				(\$1,112)	\$1,842	\$0	\$1,842
Total:		-	\$3,176	(\$222)	(\$1,112)	\$1,842	\$0	\$1,842

DELTA PINELOWSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,842
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,842
4. Present value of net income before property tax:	\$130
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.20)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.78)
Total property tax payments per harvest cycle:	(\$27)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$112
6. Land value after property tax (adj. for income tax deduction):	<b>\$120</b>

**Step 4 - Tax Burden on Low Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$41	-	\$27	\$112	\$138
Subtotal:	\$41	-	\$27	\$112	\$138
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$222	-	\$144	-	\$144
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,112	\$1,112	-	\$1,112
Subtotal:	\$222	\$1,112	\$1,256	-	\$1,256
Totals:	\$263	\$1,112	\$1,283	\$112	\$1,394
Tax burden as percent of gross revenues:	8.3%	35.0%	40.4%	3.5%	43.9%

DELTA HARDWOOD

**Estimated Timberland Value for Timber Production in Arkansas (MIXED HARDWOOD)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 40 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$0	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$0	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$0	Yes	\$0	\$0	\$0	\$0	\$0
17	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs.):		\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
40	3.42 (Cords)	\$ 31	\$107	(\$8)	-	\$100	-	-
40	9.78 (MBF Doyle)	\$ 274	\$2,678	(\$187)	-	\$2,491	\$0	\$62
					(\$937)	\$1,553	\$0	\$1,553
Total:		-	\$2,786	(\$195)	(\$975)	\$1,616	\$0	\$1,616

DELTA HARDWOOD

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,616
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,616
4. Present value of net income before property tax:	\$69
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$0.63)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.41)
Total property tax payments per harvest cycle:	(\$17)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$105
6. Land value after property tax (adj. for income tax deduction):	<b>\$63</b>

**Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$25	-	\$17	\$105	\$121
Subtotal:	\$25	-	\$17	\$105	\$121
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$195	-	\$127	-	\$127
Federal Income Tax on harvest revenue @ 35.0%	-	\$975	\$975	-	\$975
Subtotal:	\$195	\$975	\$1,102	-	\$1,102
Totals:	\$220	\$975	\$1,118	\$105	\$1,223
Tax burden as percent of gross revenues:	7.9%	35.0%	40.1%	3.8%	43.9%

## DCF's Harvest Volume by Region

<u>Delta Region:</u> DCF Classification	Type of Harvest	Age @ Harvest	Species	Product Classific.	Yield/yr	Units	Total Vol. @ Harvest	Percent Harvested	Harvest Volume
Marginal Pine Site	Final Hvst	34	Pine	Sawtimber	1.15	cds	39.1	100.0%	11.16
Medium Pine Site	C. Thinning	18	Pine	Pulpwood	1.49	cds	26.8	30.0%	8.03
Medium Pine Site	Final Hvst	32	Pine	Sawtimber	1.49	cds	47.6	100.0%	13.59
High Pine Site	C. Thinning	16	Pine	Pulpwood	1.92	cds	30.7	30.0%	9.21
High Pine Site	C. Thinning	23	Pine	Sawtimber	1.92	cds	44.1	30.0%	3.78
High Pine Site	Final Hvst	30	Pine	Sawtimber	1.92	cds	57.6	100.0%	16.45
Hardwood Land	Final Harvest	40	HDWD	Sawtimber	244.44	bd. ft.	9.8	100.0%	9.78
Hardwood Land	Final Harvest	40	HDWD	Pulpwood	0.09	cds	3.4	100.0%	3.42

## DELTA REGION TIMBER:

Cap Rate= 8.00%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$65	\$65	0%
2	\$95	\$95	0%
3	\$90	\$85	-6%
4	\$100	\$95	-5%
5	\$60	\$65	8%
6	\$110	\$105	-5%
7	\$75	\$75	0%
8	\$85	\$85	0%
9	\$125	\$120	-4%
10	\$100	\$100	0%
11	\$135	\$130	-4%
12	\$135	\$130	-4%
13	\$165	\$155	-6%
14	\$165	\$155	-6%
15	\$160	\$150	-6%
16	\$170	\$155	-9%
17	\$100	\$100	0%
18	\$65	\$65	0%
			-3%

OUACHITA

**CROP**

	<b>AVERAGE BUSHEL PER ACRE</b>	<b>10 YEAR AVG OF PRICES RECEIVED BY FARMERS</b>	<b>SUM</b>	<b>75/25 SPLIT</b>	<b>CAPITALI- ZATION RATE</b> 9.38%	<b>ROUNDED TO THE NEAREST \$5</b>	<b>OLD RATE ROUNDED TO THE NEAREST \$5</b>	<b>DIFF</b>	<b>% DIFF</b>
ACD 1	39	\$10.54	\$411.06	\$102.77	\$1,095.58	<b>\$1,095</b>	\$1,040	<b>\$55</b>	5%
ACD 2	31	\$10.54	\$326.74	\$81.69	\$870.84	<b>\$870</b>	\$825	<b>\$45</b>	5%
ACD 3	18	\$10.54	\$189.72	\$47.43	\$505.65	<b>\$505</b>	\$480	<b>\$25</b>	5%
ACD 4	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	\$745	<b>\$40</b>	5%
ACD 5	18	\$10.54	\$189.72	\$47.43	\$505.65	<b>\$505</b>	\$480	<b>\$25</b>	5%
ACD 6	18	\$10.54	\$189.72	\$47.43	\$505.65	<b>\$505</b>	\$480	<b>\$25</b>	5%
ACD 7	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	\$745	<b>\$40</b>	5%
ACD 8	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	\$745	<b>\$40</b>	5%
ACD 9	18	\$10.54	\$189.72	\$47.43	\$505.65	<b>\$505</b>	\$480	<b>\$25</b>	5%
ACD 10	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	\$745	<b>\$40</b>	5%
ACD 11	15	\$10.54	\$158.10	\$39.53	\$421.38	<b>\$420</b>	\$400	<b>\$20</b>	5%
ACD 12	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	\$745	<b>\$40</b>	5%
ACD 13	20	\$10.54	\$210.80	\$52.70	\$561.83	<b>\$560</b>	\$535	<b>\$25</b>	5%
ACD 14	20	\$10.54	\$210.80	\$52.70	\$561.83	<b>\$560</b>	\$535	<b>\$25</b>	5%
ACD 15						<b>\$315</b>	\$300	<b>\$15</b>	5%
ACD 16						<b>\$250</b>	\$240	<b>\$10</b>	4%
ACD 17						<b>\$195</b>	\$185	<b>\$10</b>	5%
ACD 18						<b>\$120</b>	\$115	<b>\$5</b>	4%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE  
 USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT



OUACHITA

PASTURE

	AUM	AVG \$ PER AUM	TOTAL	CAPITAL- IZATION RATE	ROUNDED TO NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
				8.38%				
ACD 1	8.4	\$2.82	\$23.69	\$282.67	<b>\$285</b>	\$275	<b>\$10</b>	4%
ACD 2	7.7	\$2.82	\$21.71	\$259.12	<b>\$260</b>	\$250	<b>\$10</b>	4%
ACD 3	5.1	\$2.82	\$14.38	\$171.62	<b>\$170</b>	\$165	<b>\$5</b>	3%
ACD 4	6.3	\$2.82	\$17.77	\$212.00	<b>\$210</b>	\$205	<b>\$5</b>	2%
ACD 5	5.1	\$2.82	\$14.38	\$171.62	<b>\$170</b>	\$165	<b>\$5</b>	3%
ACD 6	4.2	\$2.82	\$11.84	\$141.34	<b>\$140</b>	\$135	<b>\$5</b>	4%
ACD 7	6.7	\$2.82	\$18.89	\$225.47	<b>\$225</b>	\$220	<b>\$5</b>	2%
ACD 8	6.1	\$2.82	\$17.20	\$205.27	<b>\$205</b>	\$200	<b>\$5</b>	3%
ACD 9	3.9	\$2.82	\$11.00	\$131.24	<b>\$130</b>	\$130	<b>\$0</b>	0%
ACD 10	6.7	\$2.82	\$18.89	\$225.47	<b>\$225</b>	\$220	<b>\$5</b>	2%
ACD 11	4.2	\$2.82	\$11.84	\$141.34	<b>\$140</b>	\$135	<b>\$5</b>	4%
ACD 12	6.9	\$2.82	\$19.46	\$232.20	<b>\$230</b>	\$225	<b>\$5</b>	2%
ACD 13	6.4	\$2.82	\$18.05	\$215.37	<b>\$215</b>	\$210	<b>\$5</b>	2%
ACD 14	5.1	\$2.82	\$14.38	\$171.62	<b>\$170</b>	\$165	<b>\$5</b>	3%
ACD 15	4.2	\$2.82	\$11.84	\$141.34	<b>\$140</b>	\$135	<b>\$5</b>	4%
ACD 16	4.2	\$2.82	\$11.84	\$141.34	<b>\$140</b>	\$135	<b>\$5</b>	4%
ACD 17	4.2	\$2.82	\$11.84	\$141.34	<b>\$140</b>	\$135	<b>\$5</b>	4%
ACD 18					<b>\$75</b>	\$75	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE  
 USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

OUACHITA PINEHIGH SITE

**Estimated Timberland Value for Timber Production in Arkansas (High-Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 30 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>		<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$174	No	\$0	\$174	\$0	\$1,743	\$1,917
3	Spray	\$52	Yes	\$18	\$34	\$140	\$260	\$136
8	PCT	\$89	Yes	\$31	\$58	\$150	\$278	\$155
18	Fert.	\$83	Yes	\$29	\$54	\$47	\$87	\$65
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$398	-	\$79	\$320	\$337	\$2,369	\$2,273
Annual Expenses:								
Adminstration/management.:		\$10	Yes	\$4	\$7	\$32	\$60	\$31
Subtotal (30 yrs.):		\$300	"	\$105	\$195	\$334	\$619	\$376
Total:		\$698	-	\$184	\$515	\$671	\$2,988	\$2,649
**Interest rate used in computations is:			8.0%					

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax @ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
16	9.21 (Cords)	\$ 25	\$233	(\$16)	-	\$217	-	-
					(\$82) <sup>1</sup>	\$135	\$279	\$414
23	3.78 (MBF Doyle)	\$ 311	\$1,177	(\$82)	-	\$1,094	-	-
					(\$412) <sup>1</sup>	\$683	\$512	\$1,195
30	16.45 (MBF Doyle)	\$ 311	\$5,117	(\$358)	-	\$4,758	-	-
					(\$1,651) <sup>1</sup>	\$3,107	\$0	\$3,107
Total:		-	\$6,526	(\$457)	(\$2,145)	\$3,242	\$791	\$4,716

<sup>1</sup> Less Site Prep/Plant Expense and adjusted for fed. tax deduction.

OUACHITA PINEHIGHSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$4,716
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$2,649)
3. Net income before property tax:	\$2,068
4. Present value of net income before property tax:	\$206
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.91)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.24)
Total property tax payments per harvest cycle:	(\$37)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$118
6. Land value after property tax (adj. for income tax deduction):	<b>\$191</b>

**Step 4 - Tax Burden on High Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$57	-	\$37	\$118	\$155
Subtotal:	\$57	-	\$37	\$118	\$155
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$457	-	\$297	-	\$297
Federal Income Tax on harvest revenue @ 35.0%	-	\$2,145	\$2,145	-	\$2,145
Subtotal:	\$457	\$2,145	\$2,442	-	\$2,442
Totals:	\$514	\$2,145	\$2,479	\$118	\$2,597
Tax burden as percent of gross revenues:	7.9%	32.9%	38.0%	1.8%	39.8%

OUACHITA PINEMEDSITE

**Estimated Timberland Value for Timber Production in Arkansas (Medium-Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 32 Years):**

<u>Out-of-Pocket Expenses:</u>							
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant		No	\$0	\$0	\$0	\$0
3	Spray		Yes	\$0	\$0	\$0	\$0
8	PCT		Yes	\$0	\$0	\$0	\$0
19	Fert.	\$0	Yes	\$0	\$0	\$0	\$0
26	Fert.	\$0	Yes	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0
Annual Expenses:							
Adminstration/management.:		\$8	Yes	\$3	\$5	\$31	\$29
Subtotal (32 yrs.):		\$256	"	\$90	\$166	\$328	\$358
Total:		\$256	-	\$90	\$166	\$328	\$358

\*\*Interest rate used in computations is: 8.0%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax @ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
18	8.03 (Cords)	\$25.30	\$203	(\$14)	-	\$189	-	-
32	13.59 (MBF Doyle)	\$311.08	\$4,228	(\$296)	-	\$3,932	\$243	\$361
					(\$1,480)	\$2,452	\$0	\$2,452
Total:		-	\$4,431	(\$310)	(\$1,551)	\$2,570	\$243	\$2,813

<sup>1</sup> Less Site Prep/Plant Expense and adjusted for fed. tax deduction.

OUACHITA PINEMEDSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,813
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before property tax:	\$2,455
4. Present value of net income before property tax:	\$206
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.90)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.24)
Total property tax payments per harvest cycle:	(\$40)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$145
6. Land value after property tax (adj. for income tax deduction):	<b>\$190</b>

**Step 4 - Tax Burden on Medium Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$61	-	\$40	\$145	\$184
Subtotal:	\$61	-	\$40	\$145	\$184
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$310	-	\$202	-	\$202
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,551	\$1,551	-	\$1,551
Subtotal:	\$310	\$1,551	\$1,752	-	\$1,752
Totals:	\$371	\$1,551	\$1,792	\$145	\$1,937
Tax burden as percent of gross revenues:	8.4%	35.0%	40.4%	3.3%	43.7%

OUACHITA PINELOWSITE

**Estimated Timberland Value for Timber Production in Arkansas (Low Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 34 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$0	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$0	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$0	Yes	\$0	\$0	\$0	\$0	\$0
19	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs.):		\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0

\*\*Interest rate used in computations is: 8.0%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
		\$25	\$0	\$0	-	\$0	-	-
	(Cords)				\$0	\$0	\$0	\$0
34	11.16	\$311	\$3,471	(\$243)		\$3,228	-	-
	(MBF Doyle)				(\$1,215)	\$2,013	\$0	\$2,013
Total:		-	\$3,471	(\$243)	(\$1,215)	\$2,013	\$0	\$2,013

OUACHITA PINELOWSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,013
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$2,013
4. Present value of net income before property tax:	\$142
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.31)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.85)
Total property tax payments per harvest cycle:	(\$29)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$122
6. Land value after property tax (adj. for income tax deduction):	<b>\$131</b>

**Step 4 - Tax Burden on Low Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$45	-	\$29	\$122	\$151
Subtotal:	\$45	-	\$29	\$122	\$151
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$243	-	\$158	-	\$158
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,215	\$1,215	-	\$1,215
Subtotal:	\$243	\$1,215	\$1,373	-	\$1,373
Totals:	\$288	\$1,215	\$1,402	\$122	\$1,524
Tax burden as percent of gross revenues:	8.3%	35.0%	40.4%	3.5%	43.9%

OUACHITA HARDWOOD

**Estimated Timberland Value for Timber Production in Arkansas (MIXED HARDWOOD)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 40 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on</u>		<u>Acc. Total at Harvest</u>
						<u>Fed. Benefit</u>	<u>Net Out.</u>	
0	Prep./Plant	\$0	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$0	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$0	Yes	\$0	\$0	\$0	\$0	\$0
17	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs.):		\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
40	3.42 (Cords)	\$ 40	\$137	(\$10)	- (\$48)	\$128 \$80	- \$0	- \$80
40	9.78 (MBF Doyle)	\$ 302	\$2,954	(\$207)	- (\$1,034)	\$2,747 \$1,713	- \$0	- \$1,713
Total:		-	\$3,091	(\$216)	(\$1,082)	\$1,793	\$0	\$1,793



OUACHITA HARDWOOD

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,793
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,793
4. Present value of net income before property tax:	\$76
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$0.70)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.46)
Total property tax payments per harvest cycle:	(\$18)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$116
6. Land value after property tax (adj. for income tax deduction):	<b>\$70</b>

**Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$28	-	\$18	\$116	\$135
Subtotal:	\$28	-	\$18	\$116	\$135
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$216	-	\$141	-	\$141
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,082	\$1,082	-	\$1,082
Subtotal:	\$216	\$1,082	\$1,223	-	\$1,223
Totals:	\$245	\$1,082	\$1,241	\$116	\$1,357
Tax burden as percent of gross revenues:	7.9%	35.0%	40.1%	3.8%	43.9%

## DCF's Harvest Volume by Region

<u>Quachita Region</u>									
<u>DCF Classification</u>	<u>Type of Harvest</u>	<u>Age @ Harvest</u>	<u>Species</u>	<u>Product Classific.</u>	<u>Yield/yr</u>	<u>Units</u>	<u>Total Vol. @ Harvest</u>	<u>Percent Harvested</u>	<u>Harvest Volume</u>
Marginal Pine Site	Final Hvst	34	Pine	Sawtimber	1.15	cds	39.1	100.0%	11.16
Medium Pine Site	C. Thinning	18	Pine	Pulpwood	1.49	cds	26.8	30.0%	8.03
Medium Pine Site	Final Hvst	32	Pine	Sawtimber	1.49	cds	47.6	100.0%	13.59
High Pine Site	C. Thinning	16	Pine	Pulpwood	1.92	cds	30.7	30.0%	9.21
High Pine Site	C. Thinning	23	Pine	Sawtimber	1.92	cds	44.1	30.0%	3.78
High Pine Site	Final Hvst	30	Pine	Sawtimber	1.92	cds	57.6	100.0%	16.45
Hardwood Land	Final Harvest	40	HDWD	Sawtimber	244.44	bd. ft.	9.8	100.0%	9.78
Hardwood Land	Final Harvest	40	HDWD	Pulpwood	0.09	cds	3.4	100.0%	3.42

## OUACHITA REGION TIMBER:

Cap Rate= 8.00%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$70	\$70	0%
2	\$185	\$175	-5%
3	\$70	\$70	0%
4	\$125	\$120	-4%
5	\$100	\$100	0%
6	\$130	\$125	-4%
7	\$120	\$115	-4%
8	\$100	\$100	0%
9	\$145	\$140	-3%
10	\$100	\$100	0%
11	\$145	\$140	-3%
12	\$180	\$170	-6%
13	\$180	\$170	-6%
14	\$170	\$160	-6%
15	\$155	\$150	-3%
16	\$165	\$160	-3%
17	\$100	\$100	0%
18	\$70	\$70	0%
			-3%

OZARK

**CROP**

	<b>AVERAGE BUSHEL PER ACRE</b>	<b>10 YEAR AVG OF PRICES RECEIVED BY FARMERS</b>	<b>SUM</b>	<b>75/25 SPLIT</b>	<b>CAPITALI- ZATION RATE</b>	<b>ROUNDED TO THE NEAREST \$5</b>	<b>OLD RATE ROUNDED TO THE NEAREST \$5</b>	<b>DIFF</b>	<b>% DIFF</b>
					9.38%				
ACD 1	38	\$10.54	\$400.52	\$100.13	\$1,067.48	<b>\$1,065</b>	<b>\$1,015</b>	<b>\$50</b>	5%
ACD 2	31	\$10.54	\$326.74	\$81.69	\$870.84	<b>\$870</b>	<b>\$825</b>	<b>\$45</b>	5%
ACD 3	23	\$10.54	\$242.42	\$60.61	\$646.11	<b>\$645</b>	<b>\$615</b>	<b>\$30</b>	5%
ACD 4	29	\$10.54	\$305.66	\$76.42	\$814.66	<b>\$815</b>	<b>\$775</b>	<b>\$40</b>	5%
ACD 5	23	\$10.54	\$242.42	\$60.61	\$646.11	<b>\$645</b>	<b>\$615</b>	<b>\$30</b>	5%
ACD 6	15	\$10.54	\$158.10	\$39.53	\$421.38	<b>\$420</b>	<b>\$400</b>	<b>\$20</b>	5%
ACD 7	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	<b>\$745</b>	<b>\$40</b>	5%
ACD 8	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	<b>\$745</b>	<b>\$40</b>	5%
ACD 9	15	\$10.54	\$158.10	\$39.53	\$421.38	<b>\$420</b>	<b>\$400</b>	<b>\$20</b>	5%
ACD 10	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	<b>\$745</b>	<b>\$40</b>	5%
ACD 11	15	\$10.54	\$158.10	\$39.53	\$421.38	<b>\$420</b>	<b>\$400</b>	<b>\$20</b>	5%
ACD 12	28	\$10.54	\$295.12	\$73.78	\$786.57	<b>\$785</b>	<b>\$745</b>	<b>\$40</b>	5%
ACD 13	20	\$10.54	\$210.80	\$52.70	\$561.83	<b>\$560</b>	<b>\$535</b>	<b>\$25</b>	5%
ACD 14	20	\$10.54	\$210.80	\$52.70	\$561.83	<b>\$560</b>	<b>\$535</b>	<b>\$25</b>	5%
ACD 15						<b>\$315</b>	<b>\$300</b>	<b>\$15</b>	5%
ACD 16						<b>\$250</b>	<b>\$240</b>	<b>\$10</b>	4%
ACD 17						<b>\$195</b>	<b>\$185</b>	<b>\$10</b>	5%
ACD 18						<b>\$120</b>	<b>\$115</b>	<b>\$5</b>	4%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE  
 USDA - ARKANSAS AGRICULTURAL STATISTICS

OZARK

PASTURE

	AUM	AVG \$ PER AUM	TOTAL	CAPITAL- IZATION RATE	ROUNDED TO NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
				8.38%				
ACD 1	9.8	\$2.82	\$27.64	\$329.79	\$330	\$320	\$10	3%
ACD 2	8	\$2.82	\$22.56	\$269.21	\$270	\$260	\$10	4%
ACD 3	6.1	\$2.82	\$17.20	\$205.27	\$205	\$200	\$5	3%
ACD 4	6.3	\$2.82	\$17.77	\$212.00	\$210	\$205	\$5	2%
ACD 5	6.6	\$2.82	\$18.61	\$222.10	\$220	\$215	\$5	2%
ACD 6	4.4	\$2.82	\$12.41	\$148.07	\$150	\$145	\$5	3%
ACD 7	6.5	\$2.82	\$18.33	\$218.74	\$220	\$215	\$5	2%
ACD 8	6.6	\$2.82	\$18.61	\$222.10	\$220	\$215	\$5	2%
ACD 9	4.2	\$2.82	\$11.84	\$141.34	\$140	\$135	\$5	4%
ACD 10	6.5	\$2.82	\$18.33	\$218.74	\$220	\$215	\$5	2%
ACD 11	3.1	\$2.82	\$8.74	\$104.32	\$105	\$100	\$5	5%
ACD 12	7.8	\$2.82	\$22.00	\$262.48	\$260	\$255	\$5	2%
ACD 13	6.6	\$2.82	\$18.61	\$222.10	\$220	\$215	\$5	2%
ACD 14	5.2	\$2.82	\$14.66	\$174.99	\$175	\$170	\$5	3%
ACD 15	4.4	\$2.82	\$12.41	\$148.07	\$150	\$145	\$5	3%
ACD 16	3.7	\$2.82	\$10.43	\$124.51	\$125	\$120	\$5	4%
ACD 17	3.7	\$2.82	\$10.43	\$124.51	\$125	\$120	\$5	4%
ACD 18					\$75	\$75	\$0	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE  
 USDA - ARKANSAS AGRICULTURAL STATISTICS

OZARK PINEHIGHSITE

**Estimated Timberland Value for Timber Production in Arkansas (High-Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 30 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>		<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$ 174	No	\$0	\$174	\$0	\$1,743	\$1,917
3	Spray	\$ 52	Yes	\$18	\$34	\$140	\$260	\$136
8	PCT	\$ 89	Yes	\$31	\$58	\$150	\$278	\$155
18	Fert.	\$ 83	Yes	\$29	\$54	\$47	\$87	\$65
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$398	-	\$79	\$320	\$337	\$2,369	\$2,273
Annual Expenses:								
Adminstration/management.:		\$10	Yes	\$4	\$7	\$32	\$60	\$31
Subtotal (30 yrs.):		\$300	"	\$105	\$195	\$334	\$619	\$376
Total:		\$698	-	\$184	\$515	\$671	\$2,988	\$2,649

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
16	9.21	\$21.17	\$195	(\$14)	-	\$181	-	-
	(Cords)				(\$68)	\$113	\$233	\$347
23	3.78	\$258.14	\$977	(\$68)	-	\$908	-	-
	(MBF Doyle)				(\$342)	\$566	\$425	\$992
30	16.45	\$258.14	\$4,246	(\$297)	-	\$3,949	-	-
	(MBF Doyle)				(\$1,347)	\$2,602	\$0	\$2,602
Total:		-	\$5,417	(\$379)	(\$1,757)	\$3,282	\$659	\$3,940

<sup>1</sup> Less Site Prep/Plant Expense and adjusted for fed. tax deduction.

OZARK PINEHIGHSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$3,940
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$2,649)
3. Net income before property tax:	\$1,292
4. Present value of net income before property tax:	\$129
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.19)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.77)
Total property tax payments per harvest cycle:	(\$23)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$74
6. Land value after property tax (adj. for income tax deduction):	<b>\$119</b>

**Step 4 - Tax Burden on High Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$36	-	\$23	\$74	\$97
Subtotal:	\$36	-	\$23	\$74	\$97
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$379	-	\$246	-	\$246
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,757	\$1,757	-	\$1,757
Subtotal:	\$379	\$1,757	\$2,003	-	\$2,003
Totals:	\$415	\$1,757	\$2,026	\$74	\$2,100
Tax burden as percent of gross revenues:	7.7%	32.4%	37.4%	1.4%	38.8%

OZARK PINEMEDSITE

**Estimated Timberland Value for Timber Production in Arkansas (Medium-Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 32 Years):**

<u>Out-of-Pocket Expenses:</u>							
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant		No	\$0	\$0	\$0	\$0
3	Spray		Yes	\$0	\$0	\$0	\$0
8	PCT		Yes	\$0	\$0	\$0	\$0
18	Fert.		Yes	\$0	\$0	\$0	\$0
26	Fert.		Yes	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0
Annual Expenses:							
Adminstration/management.:		\$8	Yes	\$3	\$5	\$31	\$29
Subtotal (32 yrs.):		\$256	"	\$90	\$166	\$328	\$358
Total:		\$256	-	\$90	\$166	\$328	\$358
**Interest rate used in computations is:			8.00%				

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Income Tax@ 35%</u>			
18	8.03	\$21.17	\$170	(\$12)	-	\$158	-	-
	(Cords)				(\$59) <sup>1</sup>	\$99	\$203	\$302
32	13.59	\$258.14	\$3,508	(\$246)	-	\$3,263	-	-
	(MBF Doyle)				(\$1,228) <sup>1</sup>	\$2,035	\$0	\$2,035
Total:		-	\$3,678	(\$257)	(\$1,287)	\$2,133	\$203	\$2,337

<sup>1</sup> Less Site Prep/Plant Expense and adjusted for fed. tax deduction.



OZARK PINEMEDSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,337
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before property tax:	\$1,979
4. Present value of net income before property tax:	\$166
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.53)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.00)
Total property tax payments per harvest cycle:	(\$32)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$117
6. Land value after property tax (adj. for income tax deduction):	<b>\$153</b>

**Step 4 - Tax Burden on Medium Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$49	-	\$32	\$117	\$149
Subtotal:	\$49	-	\$32	\$117	\$149
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$257	-	\$167	-	\$167
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,287	\$1,287	-	\$1,287
Subtotal:	\$257	\$1,287	\$1,455	-	\$1,455
Totals:	\$307	\$1,287	\$1,487	\$117	\$1,603
Tax burden as percent of gross revenues:	8.3%	35.0%	40.4%	3.2%	43.6%

OZARK PINELOWSITE

**Estimated Timberland Value for Timber Production in Arkansas (Low Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 34 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>		<u>Acc. Total at Harvest</u>
						<u>Net Out.</u>		
0	Prep./Plant	\$0	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$0	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$0	Yes	\$0	\$0	\$0	\$0	\$0
19	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs.):		\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Income Tax@ 35%</u>			
			\$0	\$0	-	\$0	-	-
					\$0	\$0	\$0	\$0
34	11.16	\$258	\$2,880	(\$202)		\$2,679	-	-
	(MBF Doyle)				(\$1,008) <sup>1</sup>	\$1,671	\$0	\$1,671
Total:		-	\$2,880	(\$202)	(\$1,008)	\$1,671	\$0	\$1,671

<sup>1</sup> Less Site Prep/Plant Expense and adjusted for fed. tax deduction.

OZARK PINELOWSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,671
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,671
4. Present value of net income before property tax:	\$118
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.09)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.71)
Total property tax payments per harvest cycle:	(\$24)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$101
6. Land value after property tax (adj. for income tax deduction):	<b>\$109</b>

**Step 4 - Tax Burden on Low Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$37	-	\$24	\$101	\$126
Subtotal:	\$37	-	\$24	\$101	\$126
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$202	-	\$131	-	\$131
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,008	\$1,008	-	\$1,008
Subtotal:	\$202	\$1,008	\$1,139	-	\$1,139
Totals:	\$239	\$1,008	\$1,163	\$101	\$1,265
Tax burden as percent of gross revenues:	8.3%	35.0%	40.4%	3.5%	43.9%

OZARK HARDWOOD

**Estimated Timberland Value for Timber Production in Arkansas (MIXED HARDWOOD)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 40 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$0	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$0	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$0	Yes	\$0	\$0	\$0	\$0	\$0
17	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs.):		\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
40	3.42 (Cords)	\$ 23	\$77	(\$5)	-	\$72	-	-
40	9.78 (MBF Doyle)	\$ 246	\$2,403	(\$168)	-	\$2,235	\$0	\$45
					(\$841)	\$1,394	\$0	\$1,394
Total:		-	\$2,480	(\$174)	(\$868)	\$1,438	\$0	\$1,438

OZARK HARDWOOD

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,438
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,438
4. Present value of net income before property tax:	\$61
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$0.57)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.37)
Total property tax payments per harvest cycle:	(\$15)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$93
6. Land value after property tax (adj. for income tax deduction):	<b>\$57</b>

**Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$23	-	\$15	\$93	\$108
Subtotal:	\$23	-	\$15	\$93	\$108
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$174	-	\$113	-	\$113
Federal Income Tax on harvest revenue @ 35.0%	-	\$868	\$868	-	\$868
Subtotal:	\$174	\$868	\$981	-	\$981
Totals:	\$196	\$868	\$996	\$93	\$1,089
Tax burden as percent of gross revenues:	7.9%	35.0%	40.1%	3.8%	43.9%

## DCF's Harvest Volume by Region

<u>Ozark Region</u>	<u>Type of Harvest</u>	<u>Age @ Harvest</u>	<u>Species</u>	<u>Product Classific.</u>	<u>Yield/yr</u>	<u>Units</u>	<u>Total Vol. @ Harvest</u>	<u>Percent Harvested</u>	<u>Harvest Volume</u>
DCF Classification									
Marginal Pine Site	Final Hvst	34	Pine	Sawtimber	1.15	cds	39.1	100.0%	11.16
Medium Pine Site	C. Thinning	18	Pine	Pulpwood	1.49	cds	26.8	30.0%	8.03
Medium Pine Site	Final Hvst	32	Pine	Sawtimber	1.49	cds	47.6	100.0%	13.59
High Pine Site	C. Thinning	16	Pine	Pulpwood	1.92	cds	30.7	30.0%	9.21
High Pine Site	C. Thinning	23	Pine	Pulpwood	1.92	cds	44.1	30.0%	3.78
High Pine Site	Final Hvst	30	Pine	Sawtimber	1.92	cds	57.6	100.0%	16.45
Hardwood Land	Final Harvest	40	HDWD	Sawtimber	244.44	bd. ft.	9.8	100.0%	9.78
Hardwood Land	Final Harvest	40	HDWD	Pulpwood	0.09	cds	3.4	100.0%	3.42

**OZARK REGION:**

Cap Rate= 8.00%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$50	\$50	0%
2	\$135	\$130	-4%
3	\$120	\$110	-8%
4	\$105	\$105	0%
5	\$70	\$70	0%
6	\$125	\$120	-4%
7	\$65	\$70	8%
8	\$100	\$95	-5%
9	\$120	\$115	-4%
10	\$70	\$70	0%
11	\$115	\$115	0%
12	\$145	\$140	-3%
13	\$140	\$130	-7%
14	\$125	\$120	-4%
15	\$125	\$120	-4%
16	\$120	\$115	-4%
17	\$70	\$70	0%
18	\$65	\$65	0%
			-2%

## SOUTHWEST

### CROP

	AVERAGE SOYBEAN BUSHEL PER ACRE	10 YEAR AVERAGE OF PRICES RECEIVED BY FARMERS	SUM	75/25 SPLIT	APPLIED	ROUNDED TO	OLD RATE	DIFF	% DIFF
					CAPITALI- ZATION RATE	THE NEAREST	ROUNDED TO		
						\$5	\$5		
					9.38%				
ACD 1	36	\$10.54	\$379.44	\$94.86	\$1,011.30	<b>\$1,010</b>	\$960	<b>\$50</b>	5%
ACD 2	31	\$10.54	\$326.74	\$81.69	\$870.84	<b>\$870</b>	\$825	<b>\$45</b>	5%
ACD 3	20	\$10.54	\$210.80	\$52.70	\$561.83	<b>\$560</b>	\$535	<b>\$25</b>	5%
ACD 4	27	\$10.54	\$284.58	\$71.15	\$758.48	<b>\$760</b>	\$720	<b>\$40</b>	6%
ACD 5	20	\$10.54	\$210.80	\$52.70	\$561.83	<b>\$560</b>	\$535	<b>\$25</b>	5%
ACD 6	15	\$10.54	\$158.10	\$39.53	\$421.38	<b>\$420</b>	\$400	<b>\$20</b>	5%
ACD 7	29	\$10.54	\$305.66	\$76.42	\$814.66	<b>\$815</b>	\$775	<b>\$40</b>	5%
ACD 8	29	\$10.54	\$305.66	\$76.42	\$814.66	<b>\$815</b>	\$775	<b>\$40</b>	5%
ACD 9	15	\$10.54	\$158.10	\$39.53	\$421.38	<b>\$420</b>	\$400	<b>\$20</b>	5%
ACD 10	29	\$10.54	\$305.66	\$76.42	\$814.66	<b>\$815</b>	\$775	<b>\$40</b>	5%
ACD 11	15	\$10.54	\$158.10	\$39.53	\$421.38	<b>\$420</b>	\$400	<b>\$20</b>	5%
ACD 12	27	\$10.54	\$284.58	\$71.15	\$758.48	<b>\$760</b>	\$720	<b>\$40</b>	6%
ACD 13	21	\$10.54	\$221.34	\$55.34	\$589.93	<b>\$590</b>	\$560	<b>\$30</b>	5%
ACD 14	21	\$10.54	\$221.34	\$55.34	\$589.93	<b>\$590</b>	\$560	<b>\$30</b>	5%
ACD 15						<b>\$315</b>	\$300	<b>\$15</b>	5%
ACD 16						<b>\$250</b>	\$240	<b>\$10</b>	4%
ACD 17						<b>\$195</b>	\$185	<b>\$10</b>	5%
ACD 18						<b>\$120</b>	\$115	<b>\$5</b>	4%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE  
 USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT



**SOUTHWEST**

**PASTURE**

	<b>AUM</b>	<b>AVG \$ PER AUM</b>	<b>TOTAL</b>	<b>APPLIED CAPITAL- IZATION RATE</b>	<b>ROUNDED TO NEAREST \$5</b>	<b>OLD RATE ROUNDED TO THE NEAREST \$5</b>	<b>DIFF</b>	<b>% DIFF</b>
				8.38%				
ACD 1	9.1	\$2.82	\$25.66	\$306.23	<b>\$305</b>	\$300	<b>\$5</b>	2%
ACD 2	8.1	\$2.82	\$22.84	\$272.58	<b>\$275</b>	\$265	<b>\$10</b>	4%
ACD 3	6.1	\$2.82	\$17.20	\$205.27	<b>\$205</b>	\$200	<b>\$5</b>	3%
ACD 4	7.2	\$2.82	\$20.30	\$242.29	<b>\$240</b>	\$235	<b>\$5</b>	2%
ACD 5	5.2	\$2.82	\$14.66	\$174.99	<b>\$175</b>	\$170	<b>\$5</b>	3%
ACD 6	5.2	\$2.82	\$14.66	\$174.99	<b>\$175</b>	\$170	<b>\$5</b>	3%
ACD 7	6.8	\$2.82	\$19.18	\$228.83	<b>\$230</b>	\$220	<b>\$10</b>	5%
ACD 8	5.5	\$2.82	\$15.51	\$185.08	<b>\$185</b>	\$180	<b>\$5</b>	3%
ACD 9	4	\$2.82	\$11.28	\$134.61	<b>\$135</b>	\$130	<b>\$5</b>	4%
ACD 10	5	\$2.82	\$14.10	\$168.26	<b>\$170</b>	\$165	<b>\$5</b>	3%
ACD 11	4.5	\$2.82	\$12.69	\$151.43	<b>\$150</b>	\$145	<b>\$5</b>	3%
ACD 12	7.9	\$2.82	\$22.28	\$265.85	<b>\$265</b>	\$260	<b>\$5</b>	2%
ACD 13	7.2	\$2.82	\$20.30	\$242.29	<b>\$240</b>	\$235	<b>\$5</b>	2%
ACD 14	6	\$2.82	\$16.92	\$201.91	<b>\$200</b>	\$195	<b>\$5</b>	3%
ACD 15	4.8	\$2.82	\$13.54	\$161.53	<b>\$145</b>	\$145	<b>\$0</b>	0%
ACD 16	3	\$2.82	\$8.46	\$100.95	<b>\$100</b>	\$100	<b>\$0</b>	0%
ACD 17	3	\$2.82	\$8.46	\$100.95	<b>\$100</b>	\$100	<b>\$0</b>	0%
ACD 18					<b>\$75</b>	\$75	<b>\$0</b>	0%

**SOURCES:**

NATURAL RESOURCES CONSERVATION SERVICE  
 USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

SOUTHWEST  
PINEHIGHSITE

**Estimated Timberland Value for Timber Production in Arkansas (High-Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 30 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$ 174	No	\$0	\$174	\$0	\$1,743	\$1,917
3	Spray	\$ 52	Yes	\$18	\$34	\$140	\$260	\$136
8	PCT	\$ 89	Yes	\$31	\$58	\$150	\$278	\$155
18	Fert.	\$ 83	Yes	\$29	\$54	\$47	\$87	\$65
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$398	-	\$79	\$320	\$337	\$2,369	\$2,273
Annual Expenses:								
Adminstration/management.:		\$10	Yes	\$4	\$7	\$32	\$60	\$31
Subtotal (30 yrs.):		\$300	"	\$105	\$195	\$334	\$619	\$376
Total:		\$698	-	\$184	\$515	\$671	\$2,988	\$2,649

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>			<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>				
16	9.21 (Cords)	\$ 25	\$233	(\$16)	-	\$217	-	-	
					(\$82)	\$135	\$279	\$414	
23	3.78 (MBF Doyle)	\$ 311	\$1,177	(\$82)	-	\$1,094	-	-	
					(\$412)	\$683	\$512	\$1,195	
30	16.45 (MBF Doyle)	\$ 311	\$5,117	(\$358)	-	\$4,758	-	-	
					(\$1,651)	\$3,107	\$0	\$3,107	
Total:		-	\$6,526	(\$457)	(\$2,145)	\$3,242	\$791	\$4,716	

<sup>1</sup> Less pro-rated share of Site Prep/Plant Expense and adjusted for fed. tax deduction.

SOUTHWEST  
PINEHIGHSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$4,716
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$2,649)
3. Net income before property tax:	\$2,068
4. Present value of net income before property tax:	\$206
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.91)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.24)
Total property tax payments per harvest cycle:	(\$37)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$118
6. Land value after property tax (adj. for income tax deduction):	<b>\$191</b>

**Step 4 - Tax Burden on High Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	
Cost-increasing:					
Property taxes on land:	\$57	-	\$37	\$118	\$155
Subtotal:	\$57	-	\$37	\$118	\$155
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$457	-	\$297	-	\$297
Federal Income Tax on harvest revenue @ 35.0%	-	\$2,145	\$2,145	-	\$2,145
Subtotal:	\$457	\$2,145	\$2,442	-	\$2,442
Totals:	\$514	\$2,145	\$2,479	\$118	\$2,597
Tax burden as percent of gross revenues:	7.9%	32.9%	38.0%	1.8%	39.8%

SOUTHWEST  
PINEMEDSITE

**Estimated Timberland Value for Timber Production in Arkansas (Medium-Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 31 Years):**

<u>Out-of-Pocket Expenses:</u>						<u>Accrued Interest on</u>		
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Fed. Benefit</u>	<u>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant		No	\$0	\$0	\$0	\$0	\$0
3	Spray		Yes	\$0	\$0	\$0	\$0	\$0
8	PCT		Yes	\$0	\$0	\$0	\$0	\$0
17	Fert.	\$ -	Yes	\$0	\$0	\$0	\$0	\$0
26	Fert.	\$ -	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$8	Yes	\$3	\$5	\$31	\$57	\$29
Subtotal (32 yrs.):		\$256	"	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
**Interest rate used in computations is:			8.00%					

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
18	8.03	\$25.30	\$203	(\$14)	-	\$189	-	-
	(Cords)				(\$71)	\$118	\$243	\$361
32	13.59	\$311.08	\$4,228	(\$296)	-	\$3,932	-	-
	(MBF Doyle)				(\$1,480)	\$2,452	\$0	\$2,452
Total:		-	\$4,431	(\$310)	(\$1,551)	\$2,570	\$243	\$2,813

<sup>1</sup> Less pro-rated share of Site Prep/Plant Expense and adjusted for fed. tax deduction.

SOUTHWEST  
PINEMEDSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,813
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before property tax:	\$2,455
4. Present value of net income before property tax:	\$206
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.90)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.24)
Total property tax payments per harvest cycle:	(\$40)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$145
6. Land value after property tax (adj. for income tax deduction):	<b>\$190</b>

**Step 4 - Tax Burden on Medium Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	
Cost-increasing:					
Property taxes on land:	\$61	-	\$40	\$145	\$184
Subtotal:	\$61	-	\$40	\$145	\$184
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$310	-	\$202	-	\$202
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,551	\$1,551	-	\$1,551
Subtotal:	\$310	\$1,551	\$1,752	-	\$1,752
Totals:	\$371	\$1,551	\$1,792	\$145	\$1,937
Tax burden as percent of gross revenues:	8.4%	35.0%	40.4%	3.3%	43.7%

SOUTHWEST  
PINELOWSITE

**Estimated Timberland Value for Timber Production in Arkansas (Low Site Pine)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 34 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>		<u>Acc. Total at Harvest</u>
						<u>Net Out.</u>		
0	Prep./Plant	\$0	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$0	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$0	Yes	\$0	\$0	\$0	\$0	\$0
19	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs.):		\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
		\$25	\$0	\$0	-	\$0	-	-
	(Cords)				\$0	\$0	\$0	\$0
34	11.16	\$311	\$3,471	(\$243)		\$3,228	-	-
	(MBF Doyle)				(\$1,215)	\$2,013	\$0	\$2,013
Total:		-	\$3,471	(\$243)	(\$1,215)	\$2,013	\$0	\$2,013

SOUTHWEST  
PINELOWSITE

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,013
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$2,013
4. Present value of net income before property tax:	\$142
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.31)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.85)
Total property tax payments per harvest cycle:	(\$29)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$122
6. Land value after property tax (adj. for income tax deduction):	<b>\$131</b>

**Step 4 - Tax Burden on Low Site Pine Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	
Cost-increasing:					
Property taxes on land:	\$45	-	\$29	\$122	\$151
Subtotal:	\$45	-	\$29	\$122	\$151
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$243	-	\$158	-	\$158
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,215	\$1,215	-	\$1,215
Subtotal:	\$243	\$1,215	\$1,373	-	\$1,373
Totals:	\$288	\$1,215	\$1,402	\$122	\$1,524
Tax burden as percent of gross revenues:	8.3%	35.0%	40.4%	3.5%	43.9%

SOUTHWEST  
HARDWOOD

**Estimated Timberland Value for Timber Production in Arkansas (MIXED HARDWOOD)**

**Step 1 - Investment Expenses, excluding Annual Property Tax--Harvest Age, 40 Years):**

<u>Out-of-Pocket Expenses:</u>								
<u>Age</u>	<u>Activity</u>	<u>Expense</u>	<u>Fed. Tax Deductible</u>	<u>Fed. Tax Benefit</u>	<u>Net Expense excl. Taxes</u>	<u>Accrued Interest on Fed. Benefit</u>	<u>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$0	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$0	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$0	Yes	\$0	\$0	\$0	\$0	\$0
17	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Adminstration/management.:		\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs.):		\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0

\*\*Interest rate used in computations is: 8.00%

**Step. 2 - Revenues and Federal and State Tax Treatment**

<u>Stand Age</u>	<u>Harvest Volume</u>	<u>Stumpage Price</u>	<u>Harvest Revenue</u>	<u>State and Federal Tax Payments:</u>		<u>Net Income After Tax</u>	<u>Accrued Interest on Net</u>	<u>Total Income</u>
				<u>Arkansas State Income Tax@ 7%</u>	<u>Fed. Income Tax @ 35%</u>			
40	3.42 (Cords)	\$ 40	\$137	(\$10)	- (\$48)	\$128 \$80	- \$0	- \$80
40	9.78 (MBF Doyle)	\$ 302	\$2,954	(\$207)	- (\$1,034)	\$2,747 \$1,713	- \$0	- \$1,713
Total:		-	\$3,091	(\$216)	(\$1,082)	\$1,793	\$0	\$1,793



SOUTHWEST  
HARDWOOD

**Step 3 - Estimated Timberland Value per Acre**

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,793
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,793
4. Present value of net income before property tax:	\$76
5. Annual ad valorem property taxes:	
Property tax rate:       50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$0.70)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.46)
Total property tax payments per harvest cycle:	(\$18)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$116
6. Land value after property tax (adj. for income tax deduction):	<b>\$70</b>

**Step 4 - Tax Burden on HARDWOOD Site Forest Land**

	Total Tax Payments:		Out-of-Pocket Expenses		Total
	State	Federal	Taxes	Accrued Interest	
Cost-increasing:					
Property taxes on land:	\$28	-	\$18	\$116	\$135
Subtotal:	\$28	-	\$18	\$116	\$135
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @       7.0%	\$216	-	\$141	-	\$141
Federal Income Tax on harvest revenue @       35.0%	-	\$1,082	\$1,082	-	\$1,082
Subtotal:	\$216	\$1,082	\$1,223	-	\$1,223
Totals:	\$245	\$1,082	\$1,241	\$116	\$1,357
Tax burden as percent of gross revenues:	7.9%	35.0%	40.1%	3.8%	43.9%

## DCF's Harvest Volume by Region

<b>SW Region:</b>	<b>Type of Harvest</b>	<b>Age @ Harvest</b>	<b>Species</b>	<b>Product Classific.</b>	<b>Yield/yr</b>	<b>Units</b>	<b>Total Vol. @ Harvest</b>	<b>Percent Harvested</b>	<b>Harvest Volume</b>
<b>DCF Classification</b>									
Marginal Pine Site	Final Hvst	34	Pine	Sawtimber	1.15	cds	39.1	100.0%	11.16
Medium Pine Site	C. Thinning	18	Pine	Pulpwood	1.49	cds	26.8	30.0%	8.03
Medium Pine Site	Final Hvst	32	Pine	Sawtimber	1.49	cds	47.6	100.0%	13.59
High Pine Site	C. Thinning	16	Pine	Pulpwood	1.92	cds	30.7	30.0%	9.21
High Pine Site	C. Thinning	23	Pine	Sawtimber	1.92	cds	44.1	30.0%	3.78
High Pine Site	Final Hvst	30	Pine	Sawtimber	1.92	cds	57.6	100.0%	16.45
Hardwood Land	Final Harvest	40	HDWD	Sawtimber	244.44	bd. ft.	9.8	100.0%	9.78
Hardwood Land	Final Harvest	40	HDWD	Pulpwood	0.09	cds	3.4	100.0%	3.42

## SOUTHWEST REGION TIMBER:

Cap Rate= 8.00%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac	
1	\$90	\$90	0%	90
2	\$165	\$150	-9%	165
3	\$205	\$190	-7%	205
4	\$180	\$165	-8%	180
5	\$95	\$95	0%	95
6	\$205	\$190	-7%	205
7	\$180	\$165	-8%	180
8	\$70	\$70	0%	70
9	\$155	\$145	-6%	155
10	\$70	\$70	0%	70
11	\$145	\$140	-3%	145
12	\$190	\$175	-8%	190
13	\$200	\$185	-8%	200
14	\$195	\$185	-5%	195
15	\$180	\$170	-6%	180
16	\$175	\$165	-6%	175
17	\$95	\$95	0%	95
18	\$75	\$75	0%	75
			-5%	

**CROP AND PASTURE RATES**

**Crop**

**Rental Rate Multiplier**  
  
  
**Crop Cap Rate Multiplier**

**soybean prices**

2006	6.41
2007	9.02
2008	9.64
2009	9.66
2010	10.9
2011	12.3
2012	14.3
2013	13.1
2014	10.6
2015	9.45

10 yr  
 \$11.95 last 5 yr  
 \$11.05 last 3 yr

**Soybean average price multiplier**

**Pasture**

**Pasture Cap Rate Multiplier**

	Delta States	LA	MS	Average	Reported
2006		19	16	17.5	
2007		23	18	20.5	
2008		27	18.5	22.75	21.5
2009**	na	na		19	19
2010	na	na		16	16
2011	na	na		16	16
2012				18	18

**STATE AVERAGE AUM**

7.7	DELTA
5.3	OUACHITA
6	OZARK
6.8	SOUTHWEST
6.5	<b>AVERAGE</b>

**PASTURE RENT**

17.5	2006
20.5	2007
21	2008
19	2009
16	2010
16	2011
18	2012
18	2013
18	2014
18	2015

**AVG AUM RENTAL VALUE PER ACRE**

18.2 10 yr average  
 17.6 last 5 avg  
 18 last 3 avg

**Capitalization Rate**

	Crop	Pasture
Safe Rate 10 Year Average of the 30 Year T-Bond	3.88%	3.88%
Industry Risk Rate	3.50%	3.50%
Management Rate	2.00%	1.00%
Capitalization Rate	<input type="text" value="9.38%"/>	<input type="text" value="8.38%"/>
	<input type="text" value="9.38%"/>	<input type="text" value="8.38%"/>

**Timber Mart-South Stumpage Price Data**

YEAR	Doyle Pine Sawtimber		Doyle Oak Sawtimber		Doyle Mixed Hardwood		Average Hardwood		Standard Cord Pine Pulpwood		Standard Cord Hardwood Pulpwood	
	<u>Reg. 1</u>	<u>Reg. 2</u>	<u>Reg. 1</u>	<u>Reg. 2</u>	<u>Reg. 1</u>	<u>Reg. 2</u>	<u>Reg. 1</u>	<u>Reg. 2</u>	<u>Reg. 1</u>	<u>Reg. 2</u>	<u>Reg. 1</u>	<u>Reg. 2</u>
	<b>2006</b>	\$ 443.09	\$ 364.39	\$ 272.30	\$ 263.64	\$ 210.79	\$ 178.50	\$ 241.54	\$ 221.07	\$ 19.97	\$ 14.04	\$ 24.45
<b>2007</b>	\$ 479.60	\$ 336.46	\$ 376.16	\$ 270.64	\$ 260.23	\$ 215.43	\$ 318.19	\$ 243.03	\$ 27.28	\$ 25.89	\$ 34.89	\$ 18.13
<b>2008</b>	\$ 341.44	\$ 263.64	\$ 314.21	\$ 259.26	\$ 238.96	\$ 166.16	\$ 276.59	\$ 212.71	\$ 31.01	\$ 28.03	\$ 39.70	\$ 22.97
<b>2009</b>	\$ 291.17	\$ 232.12	\$ 278.78	\$ 208.34	\$ 216.48	\$ 182.35	\$ 247.63	\$ 195.34	\$ 27.44	\$ 23.05	\$ 39.76	\$ 25.23
<b>2010</b>	\$ 284.89	\$ 261.25	\$ 300.91	\$ 237.74	\$ 260.75	\$ 201.95	\$ 280.83	\$ 219.84	\$ 31.84	\$ 25.67	\$ 46.49	\$ 29.67
<b>2011</b>	\$ 253.34	\$ 221.63	\$ 298.11	\$ 281.84	\$ 222.08	\$ 182.26	\$ 260.09	\$ 232.05	\$ 21.12	\$ 19.32	\$ 29.12	\$ 21.58
<b>2012</b>	\$ 237.48	\$ 208.76	\$ 318.85	\$ 303.28	\$ 254.45	\$ 182.35	\$ 286.65	\$ 242.81	\$ 24.09	\$ 17.47	\$ 38.34	\$ 17.57
<b>2013</b>	\$ 251.42	\$ 214.18	\$ 386.49	\$ 299.78	\$ 258.83	\$ 230.91	\$ 322.66	\$ 265.34	\$ 24.90	\$ 19.08	\$ 41.56	\$ 16.33
<b>2014</b>	\$ 259.83	\$ 234.61	\$ 486.33	\$ 359.54	\$ 299.60	\$ 231.61	\$ 392.96	\$ 295.58	\$ 23.83	\$ 19.51	\$ 55.27	\$ 28.51
<b>2015</b>	\$ 268.55	\$ 244.40	\$ 486.94	\$ 388.33	\$ 301.00	\$ 270.99	\$ 393.97	\$ 329.66	\$ 21.52	\$ 19.59	\$ 51.65	\$ 35.15
<b>10 YEAR AVG</b>	\$ 311.08	\$ 258.14	\$ 351.91	\$ 287.24	\$ 252.32	\$ 204.25	\$ 302.11	\$ 245.74	\$ 25.30	\$ 21.17	\$ 40.12	\$ 22.56

## FORESTRY RELATED COSTS

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Forestry Costs:	2006	2008	2010	2012	2014	10 Year Average
Planting by Hand	0.0863	0.1079	0.1187	0.1144	0.1122	
Planting by Machine	0.1168	0.1386	0.1469	0.2411	0.1400	
Avg	0.10155	0.12325	0.1328	0.17775	0.1261	
Cost for 604 tree/ac	\$ 61.34	\$ 74.44	\$ 80.21	\$ 107.36	\$ 76.16	
Site Prep	\$ 82.61	\$ 108.55	\$ 96.57	\$ 116.01	\$ 66.09	
Total Establishment	\$ 143.94	\$ 182.99	\$ 176.78	\$ 223.37	\$ 142.25	\$ 173.87
Spraying	\$ 79.41	\$ 48.82	\$ 47.68	\$ 55.12	\$ 29.89	\$ 52.18
PCT	\$ 58.89	\$ 80.18	\$ 166.66	\$ 50.27	*	\$ 89.00
Fertilization	\$ 77.98	\$ 110.28	\$ 62.79	\$ 86.33	\$ 79.49	\$ 83.37
						\$ 398

**NOTE:** Timber Costs are acquired from a independent source and are only calculated for even numbered years and published in odd numbered years.

\* Data source reported that not enough data was present for a PCT number for this years report. An average of the last four reports was used.

## Timber Growth/Yield Information

### Pine Yields (1/3)

***** Site Index *****						
Marg. Site 65	70	Med Site 80	80	85	High Site 90	95
----- Average Annual Growth (std. cords) -----						
1.15	1.26	1.36	1.49	1.62	1.77	1.92

### Hardwood Yields (2/3):

Species	Site Index	Cubic Ft. Growth	Bd. Ft. per Cub. Ft.	Annual Growth
W. OAK	70	60	4.07	244.44

- Note:
- (1) Sec. 537.25, Subpart C - Ordination System, Productivity Tables, Table 1, Loblolly Pine, Natural Soil Conservation Service, Little Rock, ARK., amended 11/83.
  - (2) Sec. 537.25, Subpart C - Ordination System, Productivity Tables, Cottonwood, Natural Soil Conservation Service, Little Rock, ARK., amended 7/87.
  - (3) Cubic foot volume converted to cords by using 74 cords/cubic feet. The factor of 74 based on 5,200 lbs per cord (Converting Factors for Southern Pine Products, D. L. Williams & W.C. Hopkins, Louisiana State University & USFS Southern Forest Experimental Station). Mart South)