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October 15, 2008

To: The Honorable Henry "Hank" Wilkins IV  
To: The Honorable Scott Sullivan

This report is presented pursuant to ACT 994 from the 2007 legislative session 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 2009.

No changes were made to the use valuation formula used in these calculations this year.

If you have any questions about any part of Act 994 or any part of the process please feel free to contact me.

Sincerely,

Robert McGee  
Arkansas Assessment Coordination Department  
501-324-9114  
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# Agricultural, Pastoral and Timberland Valuation for Property Tax Purposes



2009



ACD

Arkansas Assessment Coordination Department

October 12, 2008



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## Table of Contents

ACD Agricultural Guidelines .....	1-8
Map of ACD Agricultural Regions .....	4
Delta Region .....	9-20
Ouachita Region.....	21-32
Ozark Region.....	33-44
Southwest Region .....	45-56
Crop and Pasture Rates.....	57
Timber Rates.....	58-60

Guidelines For The  
Mass Appraisal  
Of  
Agricultural Lands  
In The  
State Of  
Arkansas

In compliance with Arkansas Code 26-26-407

Developed By  
The State Of Arkansas  
Assessment Coordination  
Department  
1996

Revised 2008

These guidelines were developed by the Assessment Coordination Department in compliance with Arkansas Code 26-26-407 which states:

*(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.*

*(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.*

## **The Big Picture**

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

### **REGIONS**

The land regions are based on those set by the U.S. Forest Service. There are four regions, a brief description, and the counties within that region are listed below:

Delta Region- An alluvial plain reaching from Louisiana to Missouri.

Counties include: Arkansas, Chicot, Clay, Craighead, Crittenden, Cross, Desha, Greene, Jackson, Jefferson, Lawrence, Lee, Lincoln, Lonoke, Mississippi, Monroe, Phillips, Poinsett, Prairie, St. Francis, and Woodruff.

Ouachita Region- Extends northward from the coastal plain up to the Arkansas River.

Counties include: Garland, Logan, Montgomery, Perry, Polk, Pulaski, Saline, Scott, Sebastian, and Yell.

Ozark Region- Is the largest region and is contained in the northern third of the State west of the Delta and north of the Arkansas River.

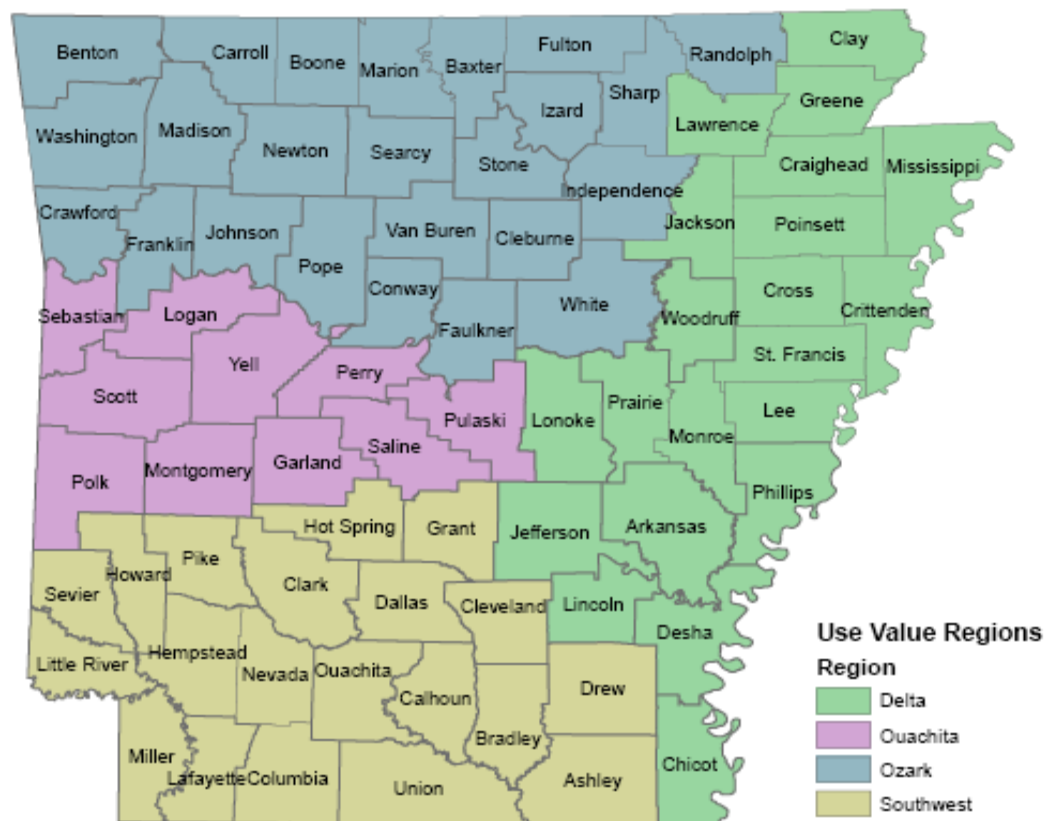
Counties include: Baxter, Benton, Boone, Carroll, Cleburne, Conway, Crawford, Faulkner, Franklin, Fulton, Independence, Izard, Johnson, Madison, Marion, Newton, Pope, Randolph, Searcy, Sharp, Stone, Van Buren, Washington, and White.

Southwest Region- Southern part of the state west of the Delta. Also known as the Coastal Plains.

Counties include: Ashley, Bradley, Calhoun, Clark, Cleveland, Columbia, Dallas, Drew, Grant, Hempstead, Hot Spring, Howard, Lafayette, Little River, Miller, Nevada, Ouachita, Pike, Sevier, and Union.

REGIONAL MAP NEXT PAGE

# AGRICULTURAL USE VALUE REGIONS



ARKANSAS ASSESSMENT COORDINATION DEPARTMENT

4/2006

## SOIL GROUPINGS

The soil groupings are based on the NRCS Land Capability Classification System. This system measures the limitations of soils using eight classes. 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, or is in the process of publishing, a soil survey for each county in Arkansas. Within these surveys each soil is described and is designated a capability class and a subclass. The surveys also contain aerial photographs which depicts where soils are located within the county.

The descriptions are as follows:  
(See next page)



## ACD Numbers and Interpretations

ACD#	LAND CAPABILITY CLASSIFICATION
1	<b>I -</b> Soils have few limitations that restrict use.
2	<b>IIw -</b> Soils have <u>moderate</u> <b>water</b> limitations that reduce the choice of plants or require moderate conservation practices.
3	<b>IIIs-</b> Soils are <u>very</u> <b>swallow</b> and suffer from severe limitations that reduce the choice of plants or that require special conservation practices, or both.
4	<b>IIIw-</b> Soils have <u>severe</u> <b>water</b> limitations that reduce the choice of plants or that require special conservation practices, or both.
5	<b>IIs -</b> Soils are <b>shallow</b> and have <u>moderate</u> limitations that reduce the choice of plants or require moderate conservation practices.
6	<b>IVs -</b> Soils are <b>shallow</b> and have <u>severe</u> limitations that reduce the choice of plants or that require careful management, or both.
7	<b>IVw-</b> Soils have <u>severe</u> <b>water</b> limitations that reduce the choice of plants or that require very careful management, or both.
8	<b>Vw -</b> Soils are not likely to erode, but have <b>water</b> limitations, impractical to remove and limits the use.
9	<b>VIIs -</b> Soils have <u>severe</u> <b>shallow</b> limitations that make them generally unsuitable for cultivation.
10	<b>VIw-</b> Soils have <u>severe</u> <b>water</b> limitations that make them generally unsuitable for cultivation.
11	<b>VIIIs-</b> Soils are <b>shallow</b> and have <u>very severe</u> limitations that make them unsuitable for cultivation.
12	<b>IIe -</b> Soils have <u>moderate</u> limitations to <b>erosion</b> that reduces the choice of plants or that require moderate conservation practices.
13	<b>IIIe-</b> Soils have <u>severe</u> limitations to <b>erosion</b> that reduces the choice of plants or that require special conservation practices, or both.
14	<b>IVe -</b> Soils have <u>very severe</u> limitations to <b>erosion</b> that reduces the choice of plants or that require very careful management, or both.
15	<b>VIe -</b> Soils have <u>very severe</u> limitations to <b>erosion</b> that make them generally unsuitable for cultivation.
16	<b>VIIe-</b> Soils have <u>very severe</u> limitations to <b>erosion</b> that make them unsuitable for cultivation.
17	<b>VIII-</b> (ROCK OUTCROPS ECT) - Soils and miscellaneous areas that have limitations that nearly preclude their use for commercial crop production.
18	<b>NO CLASS OR MISC. LAND</b>

LETTERS INDICATE LIMITATIONS (PROBLEMS) ASSOCIATED WITH THOSE SOILS.

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

## Formulas for Land Values

According to code 26-26-407 there has been a land value developed for each land capability class providing that there is data to support values. In some cases values have been filled into some classes where there has been cropping activity but data is non-documented.

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:

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

### Yields

Data for each soil class was averaged and that yield was used to determine the average productivity for each category.

### Crops

Crop Income is based on a ten year market price average for soybeans. To adjust for operating costs a 25/75 rental rate split is assumed with the 25 percent applied as net income.

### 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:

$$\text{State Average AUM} \quad 6.5$$

$$10 \text{ yr Pasture Rent Average } \$16.22$$

$$\text{Example } (\$16.23 / 6.5 = \$2.52 \text{ per AUM Statewide})$$

The average AUM for each soil class is multiplied by price per AUM and then divided by the capitalization rate.

## 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 start up capital for tree planting, herbicidal and fire treatments, as well as income produced through various thinnings 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). The soils value is then determined by multiplying total acres to determine total value. An example of each is below:

Utilizing the indicator species and the site index as the determining factor for productivity, a discount cash flow determines value for:

Site index greater than 90 is Very Productive	= Pine High Site
Site index of 89 to 70 is Productive	= Medium Pine Site
Site index of 69 to 50 is Marginal	= Low Pine Site
Site index 49 and below is Unproductive	= Min. Land Value \$100
All Hardwood lands	= Hardwood Site Value

Example of weighted value below:

### ADC #3 Ozark Region

<i>Total Value</i>	<i>Acres</i>	<i>Species/Index Value</i>
1,455,245	13,200	110.25
134,889	2,766	48.77
273,410	2,480	110.25
142,399	2,920	48.77
2,030,177	18,415	110.25
101,888	621	164.07
153,793	1,395	110.25
161,418	3,310	48.77
137,279	2,815	48.77
2,195,546	19,915	110.25
102,752	2,107	48.77
232,288	2,107	110.25
61,983	1,271	48.77
631,988	3,056	206.80
<u>3,616,726</u>	<u>32,806</u>	<u>110.25</u>
30,281,336	/ 278,199	= <b>110</b> rounded

### **Capitalization Rate for Cropland**

Safe Rate	(10 year average on 30 Year T-Bonds)	5.27%
Industry Risk Rate		3.5%
Management Rate		<u>2.00%</u>
Capitalization Rate		<b>10.77%</b>

### **Capitalization Rate for Pasture**

Safe Rate	(10 year average on 30 Year T-Bonds)	5.27%
Industry Risk Rate		3.5%
Management Rate		<u>1.00%</u>
Capitalization Rate		<b>9.77%</b>

### **Capitalization Rate for Timber**

Safe Rate	(10 year average on 30 Year T-Bonds)	5.45%
Industry Risk Rate		2.75%
Management Rate		<u>0.00%</u>
Capitalization Rate		<b>8.3%</b>

Each respective market and the soil data supplied by NRCS has been utilized in the formulation of these values and each region has been treated equally.

# DELTA

## CROP

	AVERAGE SOYBEAN BUSHEL PER ACRE	10 AVERAGE PRICES RECEIVED FARMERS	YEAR OF BY	SUM	75/25 SPLIT	APPLIED CAPITALI- ZATION RATE	ROUNDED TO THE NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
						10.77%				
ACD 1	39	\$6.01		\$234.39	\$58.60	\$544.08	<b>\$545</b>	\$510	\$35	7%
ACD 2	35	\$6.01		\$210.35	\$52.59	\$488.28	<b>\$490</b>	\$455	\$35	8%
ACD 3	18	\$6.01		\$108.18	\$27.05	\$251.11	<b>\$250</b>	\$235	\$15	6%
ACD 4	32	\$6.01		\$192.32	\$48.08	\$446.43	<b>\$445</b>	\$420	\$25	6%
ACD 5	30	\$6.01		\$180.30	\$45.08	\$418.52	<b>\$420</b>	\$390	\$30	8%
ACD 6	14	\$6.01		\$84.14	\$21.04	\$195.31	<b>\$195</b>	\$185	\$10	5%
ACD 7	29	\$6.01		\$174.29	\$43.57	\$404.57	<b>\$405</b>	\$380	\$25	7%
ACD 8	29	\$6.01		\$174.29	\$43.57	\$404.57	<b>\$405</b>	\$380	\$25	7%
ACD 9	14	\$6.01		\$84.14	\$21.04	\$195.31	<b>\$195</b>	\$185	\$10	5%
ACD 10	29	\$6.01		\$174.29	\$43.57	\$404.57	<b>\$405</b>	\$380	\$25	7%
ACD 11	14	\$6.01		\$84.14	\$21.04	\$195.31	<b>\$195</b>	\$185	\$10	5%
ACD 12	31	\$6.01		\$186.31	\$46.58	\$432.47	<b>\$430</b>	\$405	\$25	6%
ACD 13	24	\$6.01		\$144.24	\$36.06	\$334.82	<b>\$335</b>	\$315	\$20	6%
ACD 14	22	\$6.01		\$132.22	\$33.06	\$306.92	<b>\$305</b>	\$285	\$20	7%
ACD 15								\$156		
ACD 16								\$128		
ACD 17								\$99		
ACD 18								\$70		
								Avg. Diff.	\$22	6%

## SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE  
ARKANSAS AGRICULTURAL STATISTICS

DELTA

PASTURE

	AUM	AVG \$ PER AUM	TOTAL	APPLIED CAPITAL- IZATION RATE	ROUNDED TO NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
				9.95%				
ACD 1	9.9	\$2.52	24.948	\$250.73	<b>\$250</b>	\$240	\$10	4%
ACD 2	8.4	\$2.52	21.168	\$212.74	<b>\$215</b>	\$205	\$10	5%
ACD 3	5.2	\$2.52	13.104	\$131.70	<b>\$130</b>	\$125	\$5	4%
ACD 4	7.4	\$2.52	18.648	\$187.42	<b>\$185</b>	\$180	\$5	3%
ACD 5	7.1	\$2.52	17.892	\$179.82	<b>\$180</b>	\$175	\$5	3%
ACD 6	4.1	\$2.52	10.332	\$103.84	<b>\$105</b>	\$100	\$5	5%
ACD 7	6.7	\$2.52	16.884	\$169.69	<b>\$170</b>	\$165	\$5	3%
ACD 8	5.5	\$2.52	13.86	\$139.30	<b>\$140</b>	\$135	\$5	4%
ACD 9	4	\$2.52	10.08	\$101.31	<b>\$100</b>	\$100	\$0	0%
ACD 10	5.5	\$2.52	13.86	\$139.30	<b>\$140</b>	\$135	\$5	4%
ACD 11	3.5	\$2.52	8.82	\$88.64	<b>\$90</b>	\$85	\$5	6%
ACD 12	8.8	\$2.52	22.176	\$222.87	<b>\$225</b>	\$215	\$10	5%
ACD 13	7.7	\$2.52	19.404	\$195.02	<b>\$195</b>	\$190	\$5	3%
ACD 14	6.2	\$2.52	15.624	\$157.03	<b>\$155</b>	\$150	\$5	3%
ACD 15	4.7	\$2.52	11.844	\$119.04	<b>\$120</b>	\$115	\$5	4%
ACD 16	4.7	\$2.52	11.844	\$119.04	<b>\$120</b>	\$115	\$5	4%
ACD 17	4.7	\$2.52	11.844	\$119.04	<b>\$120</b>	\$115	\$5	4%
ACD 18						\$70		
						Avg. Diff.	\$6	4%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE  
ARKANSAS AGRICULTURAL STATISTICS

**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	\$ 140	No	\$0	\$140	\$0	\$1,552	\$1,692	
3	Spray	\$ 72	Yes	\$25	\$47	\$211	\$393	\$203	
8	PCT	\$ 78	Yes	\$27	\$51	\$142	\$264	\$145	
18	Fert.	\$ 56	Yes	\$20	\$37	\$34	\$63	\$46	
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0	
Subtotal:		\$347	-	\$72	\$274	\$387	\$2,271	\$2,086	
Annual Expenses:									
Administration/management.:		\$10	Yes	\$4	\$7	\$35	\$66	\$33	
Subtotal (30 yrs.):		\$300	"	\$105	\$195	\$361	\$671	\$400	
Total:		\$647	-	\$177	\$469	\$749	\$2,942	\$2,486	
**Interest rate used in computations is:			8.30%						

**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	\$ 19	\$171	(\$12)	-		\$159	-	-
	(Cords)				(\$60)	<sup>1</sup>	\$99	\$217	\$316
23	3.78	\$ 390	\$1,474	(\$103)	-		\$1,371	-	-
	(MBF Doyle)				(\$516)	<sup>1</sup>	\$855	\$674	\$1,529
30	16.45	\$ 390	\$6,410	(\$449)	-		\$5,961	-	-
	(MBF Doyle)				(\$2,122)	<sup>1</sup>	\$3,839	\$0	\$3,839
Total:		-	\$8,054	(\$564)	(\$2,698)		\$3,938	\$891	\$5,684

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

DELTA PINEHIGH SITE

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$5,684
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$2,486)
3. Net income before property tax:	\$3,198
4. Present value of net income before property tax:	\$289
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$2.68)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.74)
Total property tax payments per harvest cycle:	(\$52)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$180
6. Land value after property tax (adj. for income tax deduction):	<b>\$268</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:	\$80	-	\$52	\$180	\$232
Subtotal:	\$80	-	\$52	\$180	\$232
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$564	-	\$366	-	\$366
Federal Income Tax on harvest revenue @ 35.0%	-	\$2,698	\$2,698	-	\$2,698
Subtotal:	\$564	\$2,698	\$3,064	-	\$3,064
Totals:	\$644	\$2,698	\$3,117	\$180	\$3,297
Tax burden as percent of gross revenues:	8.0%	33.5%	38.7%	2.2%	40.9%



**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	\$0
3	Spray		Yes	\$0	\$0	\$0	\$0	\$0
8	PCT		Yes	\$0	\$0	\$0	\$0	\$0
19	Fert.		Yes	\$0	\$0	\$0	\$0	\$0
26	Fert.	-	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Administration/management.:		\$8	Yes	\$3	\$5	\$34	\$63	\$31
Subtotal (32 yrs.):		\$256	"	\$90	\$166	\$357	\$663	\$383
Total:		\$256	-	\$90	\$166	\$357	\$663	\$383
**Interest rate used in computations is:			8.30%					

**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	\$18.52	\$149	(\$10)	-		\$138	-	-
	(Cords)				(\$52)	1	\$86	\$189	\$276
32	13.59	\$389.69	\$5,296	(\$371)	-		\$4,925	-	-
	(MBF Doyle)				(\$1,854)	1	\$3,072	\$0	\$3,072
Total:		-	\$5,445	(\$381)	(\$1,906)		\$3,158	\$189	\$3,347

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

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$3,347
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$383)
3. Net income before property tax:	\$2,965
4. Present value of net income before property tax:	\$224
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$2.08)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.35)
Total property tax payments per harvest cycle:	(\$43)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$172
6. Land value after property tax (adj. for income tax deduction):	<b>\$208</b>

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

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$66	-	\$43	\$172	\$215
Subtotal:		\$66	-	\$43	\$172	\$215
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$381	-	\$248	-	\$248
Federal Income Tax on harvest revenue @	35.0%	-	\$1,906	\$1,906	-	\$1,906
Subtotal:		\$381	\$1,906	\$2,153	-	\$2,153
Totals:		\$448	\$1,906	\$2,197	\$172	\$2,369
Tax burden as percent of gross revenues:		8.2%	35.0%	40.3%	3.2%	43.5%

DELTA PINELOW SITE

**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>
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:								
Administration/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:			8.30%					

**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>			
		\$19	\$0	\$0	-	\$0	-	-
	(Cords)				\$0	\$0	\$0	\$0
34	11.16	\$390	\$4,348	(\$304)		\$4,044	-	-
	(MBF Doyle)				(\$1,522)	\$2,522	\$0	\$2,522
Total:		-	\$4,348	(\$304)	(\$1,522)	\$2,522	\$0	\$2,522

DELTA PINELOW SITE

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,522
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$2,522
4. Present value of net income before property tax:	\$160
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.48)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.96)
Total property tax payments per harvest cycle:	(\$33)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$150
6. Land value after property tax (adj. for income tax deduction):	<b>\$148</b>

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

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$50	-	\$33	\$150	\$183
Subtotal:		\$50	-	\$33	\$150	\$183
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @ 7.0%		\$304	-	\$198	-	\$198
Federal Income Tax on harvest revenue @ 35.0%		-	\$1,522	\$1,522	-	\$1,522
Subtotal:		\$304	\$1,522	\$1,720	-	\$1,720
Totals:		\$355	\$1,522	\$1,752	\$150	\$1,903
Tax burden as percent of gross revenues:		8.2%	35.0%	40.3%	3.5%	43.8%

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:								
Administration/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:			8.30%					

**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	\$ 19	\$66	(\$5)	-	\$62	-	-
	(Cords)				(\$23)	\$39	\$0	\$39
40	9.78	\$ 258	\$2,527	(\$177)	-	\$2,350	-	-
	(MBF Doyle)				(\$884)	\$1,466	\$0	\$1,466
Total:		-	\$2,593	(\$182)	(\$908)	\$1,504	\$0	\$1,504

DELTA HARDWOOD

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,504
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,504
4. Present value of net income before property tax:	\$56
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$0.52)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.34)
Total property tax payments per harvest cycle:	(\$14)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$96
6. Land value after property tax (adj. for income tax deduction):	<b>\$52</b>

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

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$21	-	\$14	\$96	\$109
Subtotal:		\$21	-	\$14	\$96	\$109
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$182	-	\$118	-	\$118
Federal Income Tax on harvest revenue @	35.0%	-	\$908	\$908	-	\$908
Subtotal:		\$182	\$908	\$1,026	-	\$1,026
Totals:		\$202	\$908	\$1,039	\$96	\$1,135
Tax burden as percent of gross revenues:		7.8%	35.0%	40.1%	3.7%	43.8%

## **DCF's Harvest Volume by Region**

<b><u>Delta Region:</u></b> <b>DCF Classification</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>
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= 8.30%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$75	\$55	-27%
2	\$100	\$105	5%
3	\$85	\$90	6%
4	\$100	\$100	0%
5	\$60	\$50	-17%
6	\$105	\$125	19%
7	\$80	\$75	-6%
8	\$85	\$80	-6%
9	\$120	\$145	21%
10	\$100	\$100	0%
11	\$125	\$155	24%
12	\$145	\$155	7%
13	\$170	\$195	15%
14	\$160	\$195	22%
15	\$165	\$200	21%
16	\$210	\$235	12%
17	\$100	\$100	0%
18	\$60	\$70	17%
			6%



# OAUCHITA

## CROP

	AVERAGE BUSHEL PER ACRE	10 YEAR AVERAGE OF PRICES RECEIVED BY FARMERS	SUM	75/25 SPLIT	CAPITALI- ZATION RATE	ROUNDED TO THE NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
					10.77%				
ACD 1	39	\$6.01	\$234.39	\$58.60	\$544.08	<b>\$545</b>	\$510	<b>\$35</b>	7%
ACD 2	31	\$6.01	\$186.31	\$46.58	\$432.47	<b>\$430</b>	\$405	<b>\$25</b>	6%
ACD 3	18	\$6.01	\$108.18	\$27.05	\$251.11	<b>\$250</b>	\$235	<b>\$15</b>	6%
ACD 4	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 5	18	\$6.01	\$108.18	\$27.05	\$251.11	<b>\$250</b>	\$235	<b>\$15</b>	6%
ACD 6	18	\$6.01	\$108.18	\$27.05	\$251.11	<b>\$250</b>	\$235	<b>\$15</b>	6%
ACD 7	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 8	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 9	18	\$6.01	\$108.18	\$27.05	\$251.11	<b>\$250</b>	\$235	<b>\$15</b>	6%
ACD 10	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 11	15	\$6.01	\$90.15	\$22.54	\$209.26	<b>\$210</b>	\$195	<b>\$15</b>	8%
ACD 12	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 13	20	\$6.01	\$120.20	\$30.05	\$279.02	<b>\$280</b>	\$260	<b>\$20</b>	8%
ACD 14	20	\$6.01	\$120.20	\$30.05	\$279.02	<b>\$280</b>	\$260	<b>\$20</b>	8%
ACD 15							\$164		
ACD 16							\$133		
ACD 17							\$101		
ACD 18							\$70		
	24						Avg. Diff.	\$21	7%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE  
ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

# OAUCHITA

## PASTURE

	AUM	AVG \$ PER AUM	TOTAL	CAPITAL- IZATION RATE	ROUNDED NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
				9.95%				
ACD 1	8.4	\$2.52	21.168	\$212.74	<b>\$215</b>	\$205	\$10	5%
ACD 2	7.7	\$2.52	19.404	\$195.02	<b>\$195</b>	\$190	\$5	3%
ACD 3	5.1	\$2.52	12.852	\$129.17	<b>\$130</b>	\$125	\$5	4%
ACD 4	6.3	\$2.52	15.876	\$159.56	<b>\$160</b>	\$155	\$5	3%
ACD 5	5.1	\$2.52	12.852	\$129.17	<b>\$130</b>	\$125	\$5	4%
ACD 6	4.2	\$2.52	10.584	\$106.37	<b>\$105</b>	\$105	\$0	0%
ACD 7	6.7	\$2.52	16.884	\$169.69	<b>\$170</b>	\$165	\$5	3%
ACD 8	6.1	\$2.52	15.372	\$154.49	<b>\$155</b>	\$150	\$5	3%
ACD 9	3.9	\$2.52	9.828	\$98.77	<b>\$100</b>	\$95	\$5	5%
ACD 10	6.7	\$2.52	16.884	\$169.69	<b>\$170</b>	\$165	\$5	3%
ACD 11	4.2	\$2.52	10.584	\$106.37	<b>\$105</b>	\$105	\$0	0%
ACD 12	6.9	\$2.52	17.388	\$174.75	<b>\$175</b>	\$170	\$5	3%
ACD 13	6.4	\$2.52	16.128	\$162.09	<b>\$160</b>	\$155	\$5	3%
ACD 14	5.1	\$2.52	12.852	\$129.17	<b>\$130</b>	\$125	\$5	4%
ACD 15	4.2	\$2.52	10.584	\$106.37	<b>\$105</b>	\$105	\$0	0%
ACD 16	4.2	\$2.52	10.584	\$106.37	<b>\$105</b>	\$105	\$0	0%
ACD 17	4.2	\$2.52	10.584	\$106.37	<b>\$105</b>	\$105	\$0	0%
ACD 18						\$70		
						Avg. Diff.	\$4	3%

### SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE  
ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

**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	\$140	No	\$0	\$140	\$0	\$1,552	\$1,692	
3	Spray	\$72	Yes	\$25	\$47	\$211	\$393	\$203	
8	PCT	\$78	Yes	\$27	\$51	\$142	\$264	\$145	
18	Fert.	\$56	Yes	\$20	\$37	\$34	\$63	\$46	
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0	
Subtotal:		\$347	-	\$72	\$274	\$387	\$2,271	\$2,086	
Annual Expenses:									
Administration/management.:		\$10	Yes	\$4	\$7	\$35	\$66	\$33	
Subtotal (30 yrs.):		\$300	"	\$105	\$195	\$361	\$671	\$400	
Total:		\$647	-	\$177	\$469	\$749	\$2,942	\$2,486	
**Interest rate used in computations is:			8.3%						

**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	\$190	(\$13)	-		\$177	-	-
	(Cords)				(\$67)	<sup>1</sup>	\$110	\$242	\$353
23	3.78	\$ 431	\$1,632	(\$114)	-		\$1,517	-	-
	(MBF Doyle)				(\$571)	<sup>1</sup>	\$946	\$746	\$1,692
30	16.45	\$ 431	\$7,094	(\$497)	-		\$6,597	-	-
	(MBF Doyle)				(\$2,362)	<sup>1</sup>	\$4,236	\$0	\$4,236
Total:		-	\$8,916	(\$624)	(\$2,999)		\$4,346	\$988	\$6,280

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

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$6,280
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$2,486)
3. Net income before property tax:	\$3,794
4. Present value of net income before property tax:	\$343
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$3.18)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$2.07)
Total property tax payments per harvest cycle:	(\$62)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$214
6. Land value after property tax (adj. for income tax deduction):	<b>\$318</b>

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

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$95	-	\$62	\$214	\$276
Subtotal:		\$95	-	\$62	\$214	\$276
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$624	-	\$406	-	\$406
Federal Income Tax on harvest revenue @	35.0%	-	\$2,999	\$2,999	-	\$2,999
Subtotal:		\$624	\$2,999	\$3,405	-	\$3,405
Totals:		\$720	\$2,999	\$3,467	\$214	\$3,680
Tax burden as percent of gross revenues:		8.1%	33.6%	38.9%	2.4%	41.3%

**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	\$0
3	Spray		Yes	\$0	\$0	\$0	\$0	\$0
8	PCT		Yes	\$0	\$0	\$0	\$0	\$0
19	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
26	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Administration/management.:		\$8	Yes	\$3	\$5	\$34	\$63	\$31
Subtotal (32 yrs.):		\$256	"	\$90	\$166	\$357	\$663	\$383
Total:		\$256	-	\$90	\$166	\$357	\$663	\$383
**Interest rate used in computations is:			8.3%					

**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	\$20.66	\$166	(\$12)	-		\$154	-	-
	(Cords)				(\$58)	1	\$96	\$211	\$307
32	13.59	\$431.30	\$5,862	(\$410)	-		\$5,451	-	-
	(MBF Doyle)				(\$2,052)	1	\$3,400	\$0	\$3,400
Total:		-	\$6,027	(\$422)	(\$2,110)		\$3,496	\$211	\$3,707

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

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$3,707
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$383)
3. Net income before property tax:	\$3,324
4. Present value of net income before property tax:	\$251
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$2.33)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.51)
Total property tax payments per harvest cycle:	(\$48)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$193
6. Land value after property tax (adj. for income tax deduction):	<b>\$233</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:	\$75	-	\$48	\$193	\$241
Subtotal:	\$75	-	\$48	\$193	\$241
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$422	-	\$274	-	\$274
Federal Income Tax on harvest revenue @ 35.0%	-	\$2,110	\$2,110	-	\$2,110
Subtotal:	\$422	\$2,110	\$2,384	-	\$2,384
Totals:	\$496	\$2,110	\$2,432	\$193	\$2,625
Tax burden as percent of gross revenues:	8.2%	35.0%	40.4%	3.2%	43.6%

OAUCHITA 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>
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:								
Administration/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:			8.3%					

**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>			
		\$21	\$0	\$0	-	\$0	-	-
	(Cords)				\$0	\$0	\$0	\$0
34	11.16	\$431	\$4,813	(\$337)		\$4,476	-	-
	(MBF Doyle)				(\$1,684)	\$2,791	\$0	\$2,791
Total:		-	\$4,813	(\$337)	(\$1,684)	\$2,791	\$0	\$2,791

OAUCHITA PINELOWSITE

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,791
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$2,791
4. Present value of net income before property tax:	\$177
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.64)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.06)
Total property tax payments per harvest cycle:	(\$36)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$167
6. Land value after property tax (adj. for income tax deduction):	<b>\$164</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:	\$56	-	\$36	\$167	\$203
Subtotal:	\$56	-	\$36	\$167	\$203
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$337	-	\$219	-	\$219
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,684	\$1,684	-	\$1,684
Subtotal:	\$337	\$1,684	\$1,903	-	\$1,903
Totals:	\$393	\$1,684	\$1,940	\$167	\$2,106
Tax burden as percent of gross revenues:	8.2%	35.0%	40.3%	3.5%	43.8%



OAUCHITA 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>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:								
Administration/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:			8.30%					

**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	\$ 13	\$46	(\$3)	-	\$42	-	-
	(Cords)				(\$16)	\$26	\$0	\$26
40	9.78	\$ 241	\$2,361	(\$165)	-	\$2,196	-	-
	(MBF Doyle)				(\$826)	\$1,369	\$0	\$1,369
Total:		-	\$2,406	(\$168)	(\$842)	\$1,396	\$0	\$1,396

OAUCHITA HARDWOOD

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,396
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,396
4. Present value of net income before property tax:	\$52
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$0.49)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.32)
Total property tax payments per harvest cycle:	(\$13)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$89
6. Land value after property tax (adj. for income tax deduction):	<b>\$49</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:	\$19	-	\$13	\$89	\$101
Subtotal:	\$19	-	\$13	\$89	\$101
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$168	-	\$109	-	\$109
Federal Income Tax on harvest revenue @ 35.0%	-	\$842	\$842	-	\$842
Subtotal:	\$168	\$842	\$952	-	\$952
Totals:	\$188	\$842	\$964	\$89	\$1,053
Tax burden as percent of gross revenues:	7.8%	35.0%	40.1%	3.7%	43.8%

## DCF's Harvest Volume by Region

<u>Ouachita Region</u>	Type of	Age @		Product			Total Vol. @	Percent	Harvest
DCF Classification	Harvest	Harvest	Species	Classific.	Yield/yr	Units	Harvest	Harvested	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

## OUACHITA REGION TIMBER:

Cap Rate= 8.30%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$60	\$50	-17%
2	\$170	\$210	24%
3	\$60	\$50	-17%
4	\$115	\$140	22%
5	\$100	\$100	0%
6	\$120	\$140	17%
7	\$130	\$135	4%
8	\$95	\$100	5%
9	\$145	\$165	14%
10	\$100	\$100	0%
11	\$140	\$165	18%
12	\$165	\$205	24%
13	\$160	\$205	28%
14	\$155	\$195	26%
15	\$145	\$175	21%
16	\$160	\$190	19%
17	\$100	\$100	0%
18	\$60	\$70	17%
			11%

# OZARK

## CROP

	AVERAGE BUSHEL PER ACRE	AVERAGE OF PRICES RECEIVED BY FARMERS	SUM	75/25 SPLIT	CAPITALI- ZATION RATE 10.77%	ROUNDED TO THE NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
ACD 1	38	\$6.01	\$228.38	\$57.10	\$530.13	<b>\$530</b>	\$495	<b>\$35</b>	7%
ACD 2	31	\$6.01	\$186.31	\$46.58	\$432.47	<b>\$430</b>	\$405	<b>\$25</b>	6%
ACD 3	23	\$6.01	\$138.23	\$34.56	\$320.87	<b>\$320</b>	\$300	<b>\$20</b>	7%
ACD 4	29	\$6.01	\$174.29	\$43.57	\$404.57	<b>\$405</b>	\$380	<b>\$25</b>	7%
ACD 5	23	\$6.01	\$138.23	\$34.56	\$320.87	<b>\$320</b>	\$300	<b>\$20</b>	7%
ACD 6	15	\$6.01	\$90.15	\$22.54	\$209.26	<b>\$210</b>	\$195	<b>\$15</b>	8%
ACD 7	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 8	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 9	15	\$6.01	\$90.15	\$22.54	\$209.26	<b>\$210</b>	\$195	<b>\$15</b>	8%
ACD 10	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 11	15	\$6.01	\$90.15	\$22.54	\$209.26	<b>\$210</b>	\$195	<b>\$15</b>	8%
ACD 12	28	\$6.01	\$168.28	\$42.07	\$390.62	<b>\$390</b>	\$365	<b>\$25</b>	7%
ACD 13	20	\$6.01	\$120.20	\$30.05	\$279.02	<b>\$280</b>	\$260	<b>\$20</b>	8%
ACD 14	20	\$6.01	\$120.20	\$30.05	\$279.02	<b>\$280</b>	\$260	<b>\$20</b>	8%
ACD 15							\$164		
ACD 16							\$133		
ACD 17							\$101		
ACD 18							\$70		
	24						Avg. Diff.	\$22	7%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE  
ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

# OZARK

## PASTURE

	AUM	AVG \$ PER AUM	TOTAL	CAPITAL- IZATION RATE	ROUNDED TO NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
				9.95%				
ACD 1	9.8	\$2.52	24.696	\$248.20	<b>\$250</b>	\$240	\$10	4%
ACD 2	8	\$2.52	20.16	\$202.61	<b>\$205</b>	\$195	\$10	5%
ACD 3	6.1	\$2.52	15.372	\$154.49	<b>\$155</b>	\$150	\$5	3%
ACD 4	6.3	\$2.52	\$15.88	\$159.56	<b>\$160</b>	\$155	\$5	3%
ACD 5	6.6	\$2.52	16.632	\$167.16	<b>\$165</b>	\$160	\$5	3%
ACD 6	4.4	\$2.52	11.088	\$111.44	<b>\$110</b>	\$105	\$5	5%
ACD 7	6.5	\$2.52	16.38	\$164.62	<b>\$165</b>	\$160	\$5	3%
ACD 8	6.6	\$2.52	16.632	\$167.16	<b>\$165</b>	\$160	\$5	3%
ACD 9	4.2	\$2.52	10.584	\$106.37	<b>\$105</b>	\$105	\$0	0%
ACD 10	6.5	\$2.52	16.38	\$164.62	<b>\$165</b>	\$160	\$5	3%
ACD 11	3.1	\$2.52	7.812	\$78.51	<b>\$80</b>	\$75	\$5	7%
ACD 12	7.8	\$2.52	19.656	\$197.55	<b>\$200</b>	\$190	\$10	5%
ACD 13	6.6	\$2.52	16.632	\$167.16	<b>\$165</b>	\$160	\$5	3%
ACD 14	5.2	\$2.52	13.104	\$131.70	<b>\$130</b>	\$125	\$5	4%
ACD 15	4.4	\$2.52	11.088	\$111.44	<b>\$110</b>	\$105	\$5	5%
ACD 16	3.7	\$2.52	9.324	\$93.71	<b>\$95</b>	\$90	\$5	6%
ACD 17	3.7	\$2.52	9.324	\$93.71	<b>\$95</b>	\$90	\$5	6%
ACD 18						\$70		
						Avg. Diff.	\$6	4%

## SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE  
ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

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>Net Out.</u>	<u>Acc. Total at Harvest</u>
0	Prep./Plant	\$ 140		No	\$0	\$140	\$0	\$1,552	\$1,692
3	Spray	\$ 72		Yes	\$25	\$47	\$211	\$393	\$203
8	PCT	\$ 78		Yes	\$27	\$51	\$142	\$264	\$145
18	Fert.	\$ 56		Yes	\$20	\$37	\$34	\$63	\$46
26	Fert.			Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$347		-	\$72	\$274	\$387	\$2,271	\$2,086
Annual Expenses:									
Administration/management.:		\$10		Yes	\$4	\$7	\$35	\$66	\$33
Subtotal (30 yrs.):		\$300		"	\$105	\$195	\$361	\$671	\$400
Total:		\$647		-	\$177	\$469	\$749	\$2,942	\$2,486
**Interest rate used in computations is:				8.30%					

**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	\$16.39	\$151	(\$11)	-		\$140	-	-
	(Cords)				(\$53)	<sup>1</sup>	\$88	\$192	\$280
23	3.78	\$348.09	\$1,317	(\$92)	-		\$1,225	-	-
	(MBF Doyle)				(\$461)	<sup>1</sup>	\$764	\$602	\$1,365
30	16.45	\$348.09	\$5,725	(\$401)	-		\$5,325	-	-
	(MBF Doyle)				(\$1,883)	<sup>1</sup>	\$3,442	\$0	\$3,442
Total:		-	\$7,193	(\$504)	(\$2,396)		\$4,293	\$794	\$5,087

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

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$5,087
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$2,486)
3. Net income before property tax:	\$2,601

OZARK PINEHIGHSITE

4. Present value of net income before property tax:	\$235
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$2.18)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.42)
Total property tax payments per harvest cycle:	(\$43)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$146
6. Land value after property tax (adj. for income tax deduction):	<b>\$218</b>

Step 4 - Tax Burden on High Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$65	-	\$43	\$146	\$189
Subtotal:		\$65	-	\$43	\$146	\$189
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$504	-	\$327	-	\$327
Federal Income Tax on harvest revenue @	35.0%	-	\$2,396	\$2,396	-	\$2,396
Subtotal:		\$504	\$2,396	\$2,724	-	\$2,724
Totals:		\$569	\$2,396	\$2,766	\$146	\$2,913
Tax burden as percent of gross revenues:		7.9%	33.3%	38.5%	2.0%	40.5%



**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	\$0
3	Spray		Yes	\$0	\$0	\$0	\$0	\$0
8	PCT		Yes	\$0	\$0	\$0	\$0	\$0
18	Fert.		Yes	\$0	\$0	\$0	\$0	\$0
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expenses:								
Administration/management.:		\$8	Yes	\$3	\$5	\$34	\$63	\$31
Subtotal (32 yrs.):		\$256	"	\$90	\$166	\$357	\$663	\$383
Total:		\$256	-	\$90	\$166	\$357	\$663	\$383
**Interest rate used in computations is:			8.30%					

**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	\$16.39	\$132	(\$9)	-	\$122	-	-
	(Cords)				(\$46)	\$76	\$168	\$244
32	13.59	\$348.09	\$4,731	(\$331)	-	\$4,400	-	-
	(MBF Doyle)				(\$1,656)	\$2,744	\$0	\$2,744
Total:		-	\$4,862	(\$340)	(\$1,702)	\$2,820	\$168	\$2,988

<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:	\$2,988
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$383)
3. Net income before property tax:	\$2,605
4. Present value of net income before property tax:	\$197
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.82)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.19)
Total property tax payments per harvest cycle:	(\$38)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$151
6. Land value after property tax (adj. for income tax deduction):	<b>\$182</b>

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

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$58	-	\$38	\$151	\$189
Subtotal:		\$58	-	\$38	\$151	\$189
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$340	-	\$221	-	\$221
Federal Income Tax on harvest revenue @	35.0%	-	\$1,702	\$1,702	-	\$1,702
Subtotal:		\$340	\$1,702	\$1,923	-	\$1,923
Totals:		\$399	\$1,702	\$1,961	\$151	\$2,112
Tax burden as percent of gross revenues:		8.2%	35.0%	40.3%	3.1%	43.4%

OZARK PINELOW SITE

**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:								
Administration/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:			8.30%					

**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	\$348	\$3,884	(\$272)		\$3,612	-	-
	(MBF Doyle)				(\$1,359) <sup>1</sup>	\$2,253	\$0	\$2,253
Total:		-	\$3,884	(\$272)	(\$1,359)	\$2,253	\$0	\$2,253

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

OZARK PINELOW SITE

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,253
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$2,253
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:	(\$1.32)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.86)
Total property tax payments per harvest cycle:	(\$29)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$134
6. Land value after property tax (adj. for income tax deduction):	<b>\$132</b>

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

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$45	-	\$29	\$134	\$164
Subtotal:		\$45	-	\$29	\$134	\$164
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$272	-	\$177	-	\$177
Federal Income Tax on harvest revenue @	35.0%	-	\$1,359	\$1,359	-	\$1,359
Subtotal:		\$272	\$1,359	\$1,536	-	\$1,536
Totals:		\$317	\$1,359	\$1,565	\$134	\$1,700
Tax burden as percent of gross revenues:		8.2%	35.0%	40.3%	3.5%	43.8%

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:								
Administration/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:			8.30%					

**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	\$ 13	\$46	(\$3)	-	\$42	-	-
	(Cords)				(\$16)	\$26	\$0	\$26
40	9.78	\$ 241	\$2,361	(\$165)	-	\$2,196	-	-
	(MBF Doyle)				(\$826)	\$1,369	\$0	\$1,369
Total:		-	\$2,406	(\$168)	(\$842)	\$1,396	\$0	\$1,396

OZARK HARDWOOD

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,396
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,396
4. Present value of net income before property tax:	\$52
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$0.49)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.32)
Total property tax payments per harvest cycle:	(\$13)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$89
6. Land value after property tax (adj. for income tax deduction):	<b>\$49</b>

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

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$19	-	\$13	\$89	\$101
Subtotal:		\$19	-	\$13	\$89	\$101
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$168	-	\$109	-	\$109
Federal Income Tax on harvest revenue @	35.0%	-	\$842	\$842	-	\$842
Subtotal:		\$168	\$842	\$952	-	\$952
Totals:		\$188	\$842	\$964	\$89	\$1,053
Tax burden as percent of gross revenues:		7.8%	35.0%	40.1%	3.7%	43.8%

## DCF's Harvest Volume by Region

<u>Ozark Region</u>	Type of Harvest	Age @ Harvest	Species	Product Classific.	Yield/yr	Units	Total Vol. @ Harvest	Percent Harvested	Harvest Volume
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= 8.30%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$55	\$46	-16%
2	\$145	\$160	10%
3	\$110	\$140	27%
4	\$105	\$120	14%
5	\$65	\$70	8%
6	\$110	\$140	27%
7	\$60	\$65	8%
8	\$95	\$105	11%
9	\$115	\$135	17%
10	\$70	\$70	0%
11	\$110	\$130	18%
12	\$150	\$165	10%
13	\$130	\$160	23%
14	\$110	\$140	27%
15	\$120	\$140	17%
16	\$120	\$135	13%
17	\$70	\$74	6%
18	\$55	\$65	18%
			12%



# SOUTHWEST

## CROP

	AVERAGE SOYBEAN BUSHEL PER ACRE	10 AVERAGE PRICES RECEIVED FARMERS	YEAR OF BY	SUM	75/25 SPLIT	APPLIED CAPITALI- ZATION RATE	ROUNDED TO THE NEAREST \$5	OLD ROUNDED TO THE NEAREST \$5	RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
						10.77%					
ACD 1	36	\$6.01		\$216.36	\$54.09	\$502.23	<b>\$500</b>	\$470		\$30	6%
ACD 2	31	\$6.01		\$186.31	\$46.58	\$432.47	<b>\$430</b>	\$405		\$25	6%
ACD 3	20	\$6.01		\$120.20	\$30.05	\$279.02	<b>\$280</b>	\$260		\$20	8%
ACD 4	27	\$6.01		\$162.27	\$40.57	\$376.67	<b>\$375</b>	\$355		\$20	6%
ACD 5	20	\$6.01		\$120.20	\$30.05	\$279.02	<b>\$280</b>	\$260		\$20	8%
ACD 6	15	\$6.01		\$90.15	\$22.54	\$209.26	<b>\$210</b>	\$195		\$15	8%
ACD 7	29	\$6.01		\$174.29	\$43.57	\$404.57	<b>\$405</b>	\$380		\$25	7%
ACD 8	29	\$6.01		\$174.29	\$43.57	\$404.57	<b>\$405</b>	\$380		\$25	7%
ACD 9	15	\$6.01		\$90.15	\$22.54	\$209.26	<b>\$210</b>	\$195		\$15	8%
ACD 10	29	\$6.01		\$174.29	\$43.57	\$404.57	<b>\$405</b>	\$380		\$25	7%
ACD 11	15	\$6.01		\$90.15	\$22.54	\$209.26	<b>\$210</b>	\$195		\$15	8%
ACD 12	27	\$6.01		\$162.27	\$40.57	\$376.67	<b>\$375</b>	\$355		\$20	6%
ACD 13	21	\$6.01		\$126.21	\$31.55	\$292.97	<b>\$295</b>	\$275		\$20	7%
ACD 14	21	\$6.01		\$126.21	\$31.55	\$292.97	<b>\$295</b>	\$275		\$20	7%
ACD 15								\$164			
ACD 16								\$133			
ACD 17								\$101			
ACD 18								\$70			
								Avg. Diff.		\$21	7%

SOURCES:

NATURAL RESOURCE CONSERVATION SERVICE  
ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

## SOUTHWEST

### PASTURE

	AUM	AVG \$ PER AUM	TOTAL	APPLIED CAPITAL- IZATION RATE	ROUNDED TO NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
				9.95%				
ACD 1	9.1	\$2.52	22.932	\$230.47	<b>\$230</b>	\$220	\$10	5%
ACD 2	8.1	\$2.52	20.412	\$205.15	<b>\$205</b>	\$200	\$5	3%
ACD 3	6.1	\$2.52	15.372	\$154.49	<b>\$155</b>	\$150	\$5	3%
ACD 4	7.2	\$2.52	18.144	\$182.35	<b>\$180</b>	\$175	\$5	3%
ACD 5	5.2	\$2.52	13.104	\$131.70	<b>\$130</b>	\$125	\$5	4%
ACD 6	5.2	\$2.52	13.104	\$131.70	<b>\$130</b>	\$125	\$5	4%
ACD 7	6.8	\$2.52	17.136	\$172.22	<b>\$170</b>	\$165	\$5	3%
ACD 8	5.5	\$2.52	13.86	\$139.30	<b>\$140</b>	\$135	\$5	4%
ACD 9	4	\$2.52	10.08	\$101.31	<b>\$100</b>	\$100	\$0	0%
ACD 10	5	\$2.52	12.6	\$126.63	<b>\$125</b>	\$120	\$5	4%
ACD 11	4.5	\$2.52	11.34	\$113.97	<b>\$115</b>	\$110	\$5	5%
ACD 12	7.9	\$2.52	19.908	\$200.08	<b>\$200</b>	\$195	\$5	3%
ACD 13	7.2	\$2.52	18.144	\$182.35	<b>\$180</b>	\$175	\$5	3%
ACD 14	6	\$2.52	15.12	\$151.96	<b>\$150</b>	\$145	\$5	3%
ACD 15	4.8	\$2.52	12.096	\$121.57	<b>\$120</b>	\$115	\$5	4%
ACD 16	3	\$2.52	7.56	\$75.98	<b>\$75</b>	\$75	\$0	0%
ACD 17	3	\$2.52	7.56	\$75.98	<b>\$75</b>	\$75	\$0	0%
ACD 18						\$70		
						Avg. Diff.	\$4	3%

#### SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE  
ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

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	\$ 140	No	\$0	\$140	\$0	\$1,552	\$1,692	
3	Spray	\$ 72	Yes	\$25	\$47	\$211	\$393	\$203	
8	PCT	\$ 78	Yes	\$27	\$51	\$142	\$264	\$145	
18	Fert.	\$ 56	Yes	\$20	\$37	\$34	\$63	\$46	
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0	
Subtotal:		\$347	-	\$72	\$274	\$387	\$2,271	\$2,086	
Annual Expenses:									
Adminstration/management.:		\$10	Yes	\$4	\$7	\$35	\$66	\$33	
Subtotal (30 yrs.):		\$300	"	\$105	\$195	\$361	\$671	\$400	
Total:		\$647	-	\$177	\$469	\$749	\$2,942	\$2,486	
**Interest rate used in computations is:			8.30%						

**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	\$190	(\$13)	-		\$177	-	-
	(Cords)				(\$67)	<sup>1</sup>	\$110	\$242	\$353
23	3.78	\$ 431	\$1,632	(\$114)	-		\$1,517	-	-
	(MBF Doyle)				(\$571)	<sup>1</sup>	\$946	\$746	\$1,692
30	16.45	\$ 431	\$7,094	(\$497)	-		\$6,597	-	-
	(MBF Doyle)				(\$2,362)	<sup>1</sup>	\$4,236	\$0	\$4,236
Total:		-	\$8,916	(\$624)	(\$2,999)		\$4,346	\$988	\$6,280

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

PINEHIGHSITE

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$6,280
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$2,486)
3. Net income before property tax:	\$3,794
4. Present value of net income before property tax:	\$343
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$3.18)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$2.07)
Total property tax payments per harvest cycle:	(\$62)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$214
6. Land value after property tax (adj. for income tax deduction):	<b>\$318</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:	\$95	-	\$62	\$214	\$276
Subtotal:	\$95	-	\$62	\$214	\$276
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$624	-	\$406	-	\$406
Federal Income Tax on harvest revenue @ 35.0%	-	\$2,999	\$2,999	-	\$2,999
Subtotal:	\$624	\$2,999	\$3,405	-	\$3,405
Totals:	\$720	\$2,999	\$3,467	\$214	\$3,680
Tax burden as percent of gross revenues:	8.1%	33.6%	38.9%	2.4%	41.3%

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>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		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	\$34	\$63	\$31	
Subtotal (32 yrs.):		\$256	"	\$90	\$166	\$357	\$663	\$383	
Total:		\$256	-	\$90	\$166	\$357	\$663	\$383	
**Interest rate used in computations is:			8.30%						

**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	\$20.66	\$166	(\$12)	-		\$154	-	-
	(Cords)				(\$58)	<sup>1</sup>	\$96	\$211	\$307
32	13.59	\$431.30	\$5,862	(\$410)	-		\$5,451	-	-
	(MBF Doyle)				(\$2,052)	<sup>1</sup>	\$3,400	\$0	\$3,400
Total:		-	\$6,027	(\$422)	(\$2,110)		\$3,496	\$211	\$3,707

<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:	\$3,707
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	(\$383)
3. Net income before property tax:	\$3,324
4. Present value of net income before property tax:	\$251
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$2.33)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.51)
Total property tax payments per harvest cycle:	(\$48)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$193
6. Land value after property tax (adj. for income tax deduction):	<b>\$233</b>

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

		Total Tax Payments:		Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	<u>Accrued Interest</u>	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$75	-	\$48	\$193	\$241
Subtotal:		\$75	-	\$48	\$193	\$241
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$422	-	\$274	-	\$274
Federal Income Tax on harvest revenue @	35.0%	-	\$2,110	\$2,110	-	\$2,110
Subtotal:		\$422	\$2,110	\$2,384	-	\$2,384
Totals:		\$496	\$2,110	\$2,432	\$193	\$2,625
Tax burden as percent of gross revenues:		8.2%	35.0%	40.4%	3.2%	43.6%

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>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:								
Administration/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:			8.30%					

**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>			
		\$21	\$0	\$0	-	\$0	-	-
	(Cords)				\$0	\$0	\$0	\$0
34	11.16	\$431	\$4,813	(\$337)		\$4,476	-	-
	(MBF Doyle)				(\$1,684)	\$2,791	\$0	\$2,791
Total:		-	\$4,813	(\$337)	(\$1,684)	\$2,791	\$0	\$2,791

SOUTHWEST  
PINELOWSITE

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$2,791
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$2,791
4. Present value of net income before property tax:	\$177
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$1.64)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$1.06)
Total property tax payments per harvest cycle:	(\$36)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$167
6. Land value after property tax (adj. for income tax deduction):	<b>\$164</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:	\$56	-	\$36	\$167	\$203
Subtotal:	\$56	-	\$36	\$167	\$203
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$337	-	\$219	-	\$219
Federal Income Tax on harvest revenue @ 35.0%	-	\$1,684	\$1,684	-	\$1,684
Subtotal:	\$337	\$1,684	\$1,903	-	\$1,903
Totals:	\$393	\$1,684	\$1,940	\$167	\$2,106
Tax burden as percent of gross revenues:	8.2%	35.0%	40.3%	3.5%	43.8%



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:								
Administration/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:			8.30%					

**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	\$ 13	\$46	(\$3)	-	\$42	-	-
	(Cords)				(\$16)	\$26	\$0	\$26
40	9.78	\$ 241	\$2,361	(\$165)	-	\$2,196	-	-
	(MBF Doyle)				(\$826)	\$1,369	\$0	\$1,369
Total:		-	\$2,406	(\$168)	(\$842)	\$1,396	\$0	\$1,396

SOUTHWEST  
HARDWOOD

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

1. Total Income including accrued interest on net thinning income to final harvest:	\$1,396
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before property tax:	\$1,396
4. Present value of net income before property tax:	\$52
5. Annual ad valorem property taxes:	
Property tax rate: 50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:	(\$0.49)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.32)
Total property tax payments per harvest cycle:	(\$13)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$89
6. Land value after property tax (adj. for income tax deduction):	<b>\$49</b>

**Step 4 - Tax Burden on HARDWOOD Site 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:	\$19	-	\$13	\$89	\$101
Subtotal:	\$19	-	\$13	\$89	\$101
Revenue-reducing:					
Arkansas State Income Tax on harvest revenue @ 7.0%	\$168	-	\$109	-	\$109
Federal Income Tax on harvest revenue @ 35.0%	-	\$842	\$842	-	\$842
Subtotal:	\$168	\$842	\$952	-	\$952
Totals:	\$188	\$842	\$964	\$89	\$1,053
Tax burden as percent of gross revenues:	7.8%	35.0%	40.1%	3.7%	43.8%

## DCF's Harvest Volume by Region

<b>SW Region:</b>									
<b>DCF Classification</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>
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= 8.30%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$115	\$85	-26%
2	\$195	\$205	5%
3	\$210	\$235	12%
4	\$215	\$235	9%
5	\$100	\$100	0%
6	\$210	\$235	12%
7	\$220	\$250	14%
8	\$90	\$50	-44%
9	\$165	\$175	6%
10	\$90	\$50	-44%
11	\$155	\$165	6%
12	\$210	\$235	12%
13	\$220	\$240	9%
14	\$210	\$230	10%
15	\$190	\$205	8%
16	\$170	\$200	18%
17	\$100	\$100	0%
18	\$70	\$80	14%
			1%

# CROP AND PASTURE RATES

## Crop

Rental Rate  
Multiplier  
25.00%

10.77%

Crop Cap Rate  
Multiplier

## soybean prices

1998	5.38
1999	4.79
2000	4.73
2001	4.37
2002	5.65
2003	7.11
2004	5.88
2005	5.92
2006	6.5
2007	9.8

\$6.01 10 yr  
\$7.04 last 5 yr  
\$7.41 last 3 yr

Soybean  
average  
price  
multiplier  
\$6.01

## Pasture

Pasture Cap Rate Multiplier  
9.95%

	Delta States	LA	MS	Average
1998		16	14.5	15.25
1999		15.5	13.5	14.5
2000		14	14	14
2001		16	16	16
2002		16	17	16.5
2003		15	16	15.5
2004		15.5	16.5	16
2005		16.5	16.5	16.5
2006		19	16	17.5
2007		23	18	20.5

STATE AVERAGE AUM		PASTURE RENT	
7.7	DELTA	15.25	1998
5.3	OUACHITA	14.5	1999
6	OZARK	14	2000
6.8	SOUTHWEST	16	2001
6.5	AVERAGE	16.5	2002
		15.5	2003
		16	2004
		16.5	2005
		17.5	2006
		20.5	2007

AVG AUM RENTAL  
VALUE PER  
ACRE  
\$2.52

\$2.52

16.225 10 yr average  
17.2 last 5 avg  
18.16667 last 3 avg

## Capitalization Rate

	Crop	Pasture
Safe Rate		
10 Year Average of the 30 Year T-Bond	5.27%	5.27%
Industry Risk Rate	3.50%	3.50%
Management Rate	2.00%	1.00%
Capitalization Rate	10.77%	9.77%
	10.77%	9.77%

## 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>1998</b>	\$ 451.37	\$ 345.01	\$ 339.88	\$ 295.00	\$162.88	\$ 222.25	\$ 251.38	\$ 258.63	\$ 17.62	\$ 14.82	\$ 14.74	\$ 15.91
<b>1999</b>	\$ 407.31	\$ 317.54	\$ 279.00	\$ 261.75	\$146.50	\$ 159.50	\$ 212.75	\$ 210.63	\$ 18.21	\$ 13.92	\$ 14.65	\$ 11.71
<b>2000</b>	\$ 405.32	\$ 343.14	\$ 286.25	\$ 227.75	\$134.25	\$ 153.25	\$ 230.50	\$ 217.75	\$ 14.37	\$ 13.74	\$ 10.96	\$ 10.05
<b>2001</b>	\$ 347.80	\$ 305.90	\$ 335.50	\$ 279.00	\$161.00	\$ 170.75	\$ 248.25	\$ 224.88	\$ 12.53	\$ 11.06	\$ 18.33	\$ 9.77
<b>2002</b>	\$ 365.09	\$ 322.86	\$ 313.25	\$ 259.75	\$146.00	\$ 151.75	\$ 229.63	\$ 205.75	\$ 12.87	\$ 12.46	\$ 16.37	\$ 12.24
<b>2003</b>	\$ 357.74	\$ 332.95	\$ 350.82	\$ 334.75	\$153.75	\$ 164.88	\$ 252.28	\$ 249.82	\$ 15.47	\$ 13.12	\$ 17.26	\$ 13.96
<b>2004</b>	\$ 403.94	\$ 339.47	\$ 373.75	\$ 331.41	\$163.19	\$ 155.31	\$ 268.47	\$ 243.36	\$ 16.77	\$ 12.40	\$ 19.23	\$ 10.69
<b>2005</b>	\$ 472.12	\$ 367.18	\$ 337.14	\$ 306.25	\$256.11	\$ 193.64	\$ 296.63	\$ 249.94	\$ 23.80	\$ 16.51	\$ 31.70	\$ 13.43
<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	\$ 10.53
<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
5 Year Avg.	\$ 431.30	\$ 348.09	\$ 342.03	\$ 301.34	\$ 208.81	\$ 181.55	\$ 275.42	\$ 241.44	\$ 20.66	\$ 16.39	\$ 25.51	\$ 13.35

## **FORESTRY RELATED COSTS**

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<b>Forestry Costs:</b>	<b>1998</b>	<b>2000</b>	<b>2002</b>	<b>2004</b>	<b>2006</b>	<b>5 Year Average</b>
Planting by Hand	0.067	0.0641	0.08	0.0668	0.0863	
Planting by Maching	0.0593	0.077	0.11	0.1116	0.1168	
Avg	0.06315	0.07055	0.095	0.0892	0.10155	
Cost for 604 tree/ac	\$ 38.14	\$ 42.61	\$ 57.38	\$ 53.88	\$ 61.34	
Site Prep (a)	\$ 84.28	\$ 93.86	\$ 114.89	\$ 72.59	\$ 82.61	
Total Establishment (c)(d)	\$ 122.42	\$ 136.47	\$ 172.27	\$ 126.46	\$ 143.94	\$ 140.31
Spraying	\$ 72.32	\$ 68.12	\$ 70.18	\$ 69.45	\$ 79.41	\$ 71.90
PCT	\$ 71.27	\$ 82.27	\$ 102.10	\$ 74.98	\$ 58.89	\$ 77.90
Fertilization	\$ 54.82	\$ 43.08	\$ 56.04	\$ 50.08	\$ 77.98	\$ 56.40
						\$347

## Timber Growth/Yield Information

### Pine Yields (1/3)

***** Site Index *****						
<u>Marg. Site</u>		<u>Med Site</u>			<u>High Site</u>	
65	70	80	80	85	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)