

# 2024 Cropland, Pastureland and Timberland



Valuation for Property Tax Purposes
Arkansas Assessment Coordination Division
Department of Finance and Administration
October 15, 2023



# STATE OF ARKANSAS Department of Finance and Administration

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October 15, 2023

To: The Honorable David Wallace
To: The Honorable Jimmy Gazaway

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 it 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 2023.

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,

Kolten McCracken Agricultural Specialist Arkansas Assessment Coordination Division Department of Finance and Administration 501-324-9113 Kolten.McCracken@acd.arkansas.gov

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Developed in 1996 by The State Of Arkansas Assessment Coordination Division of the Department of Finance and Administration in compliance with Arkansas Code 26-26-407 Revised 2023

#### 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 Division 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 Division 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.)

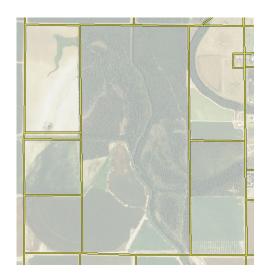
ACD#	LAND (	CAPABILITY CLASSIFICATION
1	I-	Soils have few limitations that restrict use.
2	IIw -	Soils have moderate water limitations that reduce the choice of plants or require moderate conservation practices.
3	IIIs-	Soils are very swallow and suffer from severe limitations that reduce the choice of plants or that require special conservation practices, or both.
4	IIIw-	Soils have severe water limitations that reduce the choice of plants or that require special conservation practices, or both.
5	IIs -	Soils are shallow and have moderate limitations that reduce the choice of plants or require moderate conservation practices.
6	IVs -	Soils are shallow and have severe limitations that reduce the choice of plants or that require careful management, or both.
7	IVw-	Soils have severe water limitations that reduce the choice of plants or that require very careful management, or both.
8	Vw-	Soils are not likely to erode, but have water limitations, impractical to remove and limits the use.
9	VIs -	Soils have severe shallow limitations that make them generally unsuitable for cultivation.
10	VIw-	Soils have severe water limitations that make them generally unsuitable for cultivation.
11	VIIs-	Soils are shallow and have very severe limitations that make them unsuitable for cultivation.
12	IIe -	Soils have moderate limitations to erosion that reduces the choice of plants or that require moderate conservation practices.
13	IIIe-	Soils have severe limitations to erosion that reduces the choice of plants or that require special conservation practices, or both.
14	IVe -	Soils have very severe limitations to erosion that reduces the choice of plants or that require very careful management, or both.
15	VIe -	Soils have very severe limitations to erosion that make them generally unsuitable for cultivation.
16	VIIe-	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 CL	ASS 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**

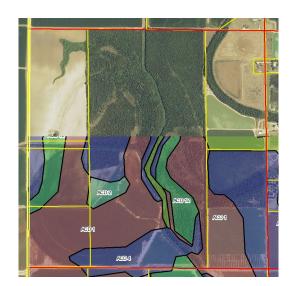
The county or its contractor uses many tools in its valuation process. First it determines the use of the property by identifying and visiting the property. A visual inspection helps determine whether it is crop, pasture, timber or as in many cases a mix of these uses. Sometimes aerial photography and/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



Identifying the property







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:

Income - Cost = Net Income / Capitalization Rate = 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 2024 values are based on data that was captured through the end of 2022, compiled and then published in the third quarter of 2023, applied to our formulas in 2023 and released for use in the reappraisal cycles ending in 2024.

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 \$10.82. 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. Below is an example of the formula. (Note: There are 18 soil classes for each use)

SOIL CLASS	AVERAGE SOYBEAN BUSHEL PER ACRE	10 YEAR AVER- AGE OF PRICES RECEIVED BY FARMERS	SUM	75/25 SPLIT	CAPITALI- ZATION RATE	ROUNDED TO THE NEAREST \$5
					8.25%	
ACD 1	39	\$10.82	\$421.98	\$105.50	\$1,278.73	\$1,280
ACD 2	35	\$10.82	\$378.70	\$94.68	\$1,147.58	\$1,150
ACD 3	18	\$10.82	\$194.76	\$48.69	\$590.18	\$590

#### 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 \$18.80. This leads to a \$2.91 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. Below is an example of the formula. (Note: There are 18 soil classes for each use)

	AUM	AVG \$ PER AUM	TOTAL	CAPITAL- IZATION RATE	ROUNDED TO NEAREST \$5
				8.00%	
ACD 1	9.9	\$2.91	\$28.52	\$356.48	\$355
ACD 2	8	\$2.91	\$23.28	\$291.00	\$290
ACD 3	6.1	\$2.91	\$17.75	\$221.89	\$220

#### 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:

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 Division, 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 with a change in ownership, 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, CRP, and any other agricultural land in conservation programs 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?

A.C.A 26-27-317 Application for adjustment. (3) The County Equalization does not have jurisdiction over and may not accept or consider a petition or letter under subdivision (a)(1) of this section for the adjustment of the: (B) Valuation of agricultural land. Pasture land, or timberland derived by the guidelines and methods set forth by the Assessment Coordination Department under 26-26-407.

The BOE may reclassify use 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** 

	AVERAGE SOYBEAN	10 YEAR AVERAGE OF PRICES				ROUNDED TO	OLD RATE ROUNDED TO		
	BUSHEL PER	RECEIVED BY			CAPITALI-	THE	THE NEAREST		
	ACRE	<b>FARMERS</b>	SUM	75/25 SPLIT	<b>ZATION RATE</b>	NEAREST \$5	\$5	DIFF	% DIFF
					8.25%				
ACD 1	39	\$10.82	\$421.98	\$105.50	\$1,278.73	\$1,280	\$1,280	<b>\$0</b>	0%
ACD 2	35	\$10.82	\$378.70	\$94.68	\$1,147.58	\$1,150	\$1,145	<b>\$5</b>	0%
ACD 3	18	\$10.82	\$194.76	\$48.69	\$590.18	\$590	\$590	<b>\$0</b>	0%
ACD 4	32	\$10.82	\$346.24	\$86.56	\$1,049.21	\$1,050	\$1,050	<b>\$0</b>	0%
ACD 5	30	\$10.82	\$324.60	\$81.15	\$983.64	\$985	\$985	<b>\$0</b>	0%
ACD 6	14	\$10.82	\$151.48	\$37.87	\$459.03	\$460	\$460	<b>\$0</b>	0%
ACD 7	29	\$10.82	\$313.78	\$78.45	\$950.85	\$950	\$950	<b>\$0</b>	0%
ACD 8	29	\$10.82	\$313.78	\$78.45	\$950.85	\$950	\$950	<b>\$0</b>	0%
ACD 9	14	\$10.82	\$151.48	\$37.87	\$459.03	\$460	\$460	<b>\$0</b>	0%
ACD 10	29	\$10.82	\$313.78	\$78.45	\$950.85	\$950	\$950	<b>\$0</b>	0%
ACD 11	14	\$10.82	\$151.48	\$37.87	\$459.03	\$460	\$460	<b>\$0</b>	0%
ACD 12	31	\$10.82	\$335.42	\$83.86	\$1,016.42	\$1,015	\$1,015	<b>\$0</b>	0%
ACD 13	24	\$10.82	\$259.68	\$64.92	\$786.91	\$785	\$785	<b>\$0</b>	0%
ACD 14	22	\$10.82	\$238.04	\$59.51	\$721.33	\$720	\$720	<b>\$0</b>	0%
ACD 15						\$325	\$325	<b>\$0</b>	0%
ACD 16						\$265	\$265	<b>\$0</b>	0%
ACD 17						\$190	\$190	<b>\$0</b>	0%
ACD 18						\$125	\$125	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

# **DELTA**

# **PASTURE**

						OLD RATE ROUNDED TO		
		AVG \$ PER		CAPITAL-	ROUNDED TO	THE NEAREST		
	AUM	AUM	TOTAL	<b>IZATION RATE</b>	NEAREST \$5	\$5	DIFF	% DIFF
				8.00%				
ACD 1	9.9	\$2.91	\$28.81	\$360.11	\$360	\$355	<b>\$5</b>	1%
ACD 2	8.4	\$2.91	\$24.44	\$305.55	\$305	\$300	<b>\$5</b>	2%
ACD 3	5.2	\$2.91	\$15.13	\$189.15	\$190	\$185	<b>\$5</b>	3%
ACD 4	7.4	\$2.91	\$21.53	\$269.18	\$270	\$265	<b>\$5</b>	2%
ACD 5	7.1	\$2.91	\$20.66	\$258.26	\$260	\$255	<b>\$5</b>	2%
ACD 6	4.1	\$2.91	\$11.93	\$149.14	\$150	\$145	<b>\$5</b>	3%
ACD 7	6.7	\$2.91	\$19.50	\$243.71	\$245	\$240	<b>\$5</b>	2%
ACD 8	5.5	\$2.91	\$16.01	\$200.06	\$200	\$195	<b>\$5</b>	3%
ACD 9	4	\$2.91	\$11.64	\$145.50	\$145	\$145	<b>\$0</b>	0%
ACD 10	5.5	\$2.91	\$16.01	\$200.06	\$200	\$195	<b>\$5</b>	3%
ACD 11	3.5	\$2.91	\$10.19	\$127.31	\$125	\$125	<b>\$0</b>	0%
ACD 12	8.8	\$2.91	\$25.61	\$320.10	\$320	\$315	<b>\$5</b>	2%
ACD 13	7.7	\$2.91	\$22.41	\$280.09	\$280	\$275	<b>\$5</b>	2%
ACD 14	6.2	\$2.91	\$18.04	\$225.53	\$225	\$220	<b>\$5</b>	2%
ACD 15	4.7	\$2.91	\$13.68	\$170.96	\$170	\$170	<b>\$0</b>	0%
ACD 16	4.7	\$2.91	\$13.68	\$170.96	\$170	\$170	<b>\$0</b>	0%
ACD 17	4.7	\$2.91	\$13.68	\$170.96	\$170	\$170	<b>\$0</b>	0%
ACD 18					\$75	\$75	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - 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):

Out-of-Poc	ket Expenses:								
Age	<u>Activity</u>	<u>Ex</u>	<u>pense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
				<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
0	Prep./Plant	\$	190	No	\$0	\$190	\$0	\$1,904	\$2,094
3	Spray	\$	71	Yes	\$25	\$46	\$190	\$352	\$184
8	PCT	\$	148	Yes	\$52	\$96	\$249	\$462	\$258
18	Fert.	\$	85	Yes	\$30	\$55	\$48	\$89	\$66
26	Fert.			Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:			\$493	-	\$106	\$387	\$486	\$2,807	\$2,602
Annual Expens	ses:								
Adminstration	/management.:		\$10	Yes	\$4	\$7	\$32	\$60	\$31
Subtotal (30 yr	s.):		\$300	"	\$105	\$195	\$334	\$619	\$376
Total:			\$793	-	\$211	\$582	\$820	\$3,427	\$2,978
	**Interest reta	1100	d in computations is:	8 NO%		-	-		

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

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

	Stand	Harvest	Stu	mpage	Harvest	State and Federal	<u> Fax Payments:</u>				
	Age	<u>Volume</u>	<u> </u>	Price Price	Revenue	Arkansas State	Fed. Income		Net Income	Accrued	Total
						Income Tax@ 7%	Tax @ 35%		After Tax	Interest on Net	Income
	16	9.21	\$	18	\$167	(\$12)	-		\$155	-	-
		(Cords)					(\$58)	1	\$97	\$200	\$297
	23	3.78	\$	254	\$961	(\$67)	-		\$894	-	-
		(MBF Doyle)					(\$336)	1	\$557	\$418	\$976
	30	16.45	\$	254	\$4,178	(\$292)	-		\$3,885	-	-
		(MBF Doyle)					(\$1,290)	1	\$2,596	\$0	\$2,596
Total:			-		\$5,305	(\$371)	(\$1,684)		\$2,692	\$618	\$3,868

<sup>&</sup>lt;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:	\$3,868
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	(\$2,978)
3. Net income before pro	\$891	
4. Present value of net in	\$89	
5. Annual ad valorem pro	perty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pa	yment:	(\$0.82)
Annual property tax pa	yment adjusted for fed. inc. tax deduction:	(\$0.53)
Total property tax payr	nents per harvest cycle:	(\$16)
Accrued interest on ou	t-of-pocket tax payments per harvest cycle:	\$51
		·
<ol><li>Land value after prope</li></ol>	rty tax (adj. for income tax deduction):	\$82

Step 4 - Tax Burden on High Site Pine Forest Land

		Total Tax	Payments:	Out-of-P	ocket Expenses	_
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$25	-	\$16	\$51	\$67
Subtotal:		\$25	-	\$16	\$51	\$67
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$371	-	\$241	-	\$241
Federal Income Tax on harvest revenue @	35.0%	-	\$1,684	\$1,684	-	\$1,684
Subtotal:		\$371	\$1,684	\$1,926	-	\$1,926
Totals:		\$396	\$1,684	\$1,942	\$51	\$1,993
Tax burden as percent of gross revenues:		7.5%	31.7%	36.6%	1.0%	37.6%

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

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

Out-of-Pock	et Expenses:		-					
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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
ubtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
nnual Expense	es:							
Adminstration/	management.:	\$8	Yes	\$3	\$5	\$31	\$57	\$29
Subtotal (32 yrs	.):	\$256	11	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
	**Interest rate	used in computations is:	8 00%					

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

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

Stand	Harvest	Stumpage	Harvest	State and Federal T	ax Payments:			
<u>Age</u>	<u>Volume</u>	<u>Price</u>	Revenue	Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%	Net Income <u>After Tax</u>	Accrued Interest on Net	Total <u>Income</u>
18	8.03	\$18.14	\$146	(\$10)	-	\$135	-	-
	(Cords)				(\$51) <sup>1</sup>	\$84	\$174	\$259
32	13.59	\$253.99	\$3,452	(\$242)	-	\$3,210	-	-
	(MBF Doyle)				(\$1,208)	\$2,002	\$0	\$2,002
l:		-	\$3,597	(\$252)	(\$1,259)	\$2,087	\$174	\$2,261

<sup>&</sup>lt;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	g accrued interest on net thinning income to final harvest:	\$2,261		
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	(\$358)		
<ol><li>Net income before pro</li></ol>	pperty tax:	\$1,903		
4. Present value of net income before property tax:				
<ol><li>Annual ad valorem pro</li></ol>	operty taxes:			
Property tax rate:	50 mills @ 20% assessment ratio	1.00%		
Annual property tax pa	Annual property tax payment:			
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.96)		
Total property tax pay	ments per harvest cycle:	(\$31)		
Accrued interest on or	ut-of-pocket tax payments per harvest cycle:	\$112		
6. Land value after prope	erty tax (adj. for income tax deduction):	\$147		

Step 4 - Tax Burden on Medium Site Pine Forest Land

		Total Tax	Payments:	Out-of-P	ocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>	
Cost-increasing:							
Property taxes on land:		\$47	-	\$31	\$112	\$143	
Subtotal:		\$47	-	\$31	\$112	\$143	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$252	-	\$164	-	\$164	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,259	\$1,259	-	\$1,259	
Subtotal:		\$252	\$1,259	\$1,423	-	\$1,423	
Totals:		\$299	\$1,259	\$1,453	\$112	\$1,566	
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.1%	43.5%	

#### **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):

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expense	es:							
Adminstration/	management.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs	a.):	\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8 UU%	-				

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

	Stand	Harvest	Stumpage	Harvest	State and Federal	Tax Payments:			
	<u>Age</u>	<u>Volume</u>	<u>Price</u>	Revenue	Arkansas State			Accrued	Total
					Income Tax@ 7%	Tax @ 35%	After Tax	Interest on Net	Income
			\$18	\$0	\$0	-	\$0	_	-
		(Cords)				\$0	\$0	\$0	\$0
	34	11.16	\$254	\$2,834	(\$198)		\$2,636	-	-
		(MBF Doyle)				(\$992)	\$1,644	\$0	\$1,644
Total:			-	\$2,834	(\$198)	(\$992)	\$1,644	\$0	\$1,644

#### **DELTA PINELOWSITE**

Step 3 - Estimated Timberland Value per Acre

Total Income including	g accrued interest on net thinning income to final harvest:	\$1,644		
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	\$0		
<ol><li>Net income before pro</li></ol>	pperty tax:	\$1,644		
4. Present value of net income before property tax:				
<ol><li>Annual ad valorem pro</li></ol>	operty taxes:			
Property tax rate:	50 mills @ 20% assessment ratio	1.00%		
Annual property tax pa	Annual property tax payment:			
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.70)		
Total property tax pay	ments per harvest cycle:	(\$24)		
Accrued interest on or	ut-of-pocket tax payments per harvest cycle:	\$100		
6. Land value after prope	erty tax (adj. for income tax deduction):	\$107		

Step 4 - Tax Burden on Low Site Pine Forest Land

		Total Tax I	Payments:	Out-of-P	Out-of-Pocket Expenses	
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$36	-	\$24	\$100	\$124
Subtotal:		\$36	-	\$24	\$100	\$124
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$198	-	\$129	-	\$129
Federal Income Tax on harvest revenue @	35.0%	-	\$992	\$992	-	\$992
Subtotal:		\$198	\$992	\$1,121	-	\$1,121
Totals:		\$235	\$992	\$1,145	\$100	\$1,244
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.5%	43.9%

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

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

Out-of-Pock	cet Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expense	es:							
Adminstration/	management.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs	s.):	\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Intoract rate	used in commutations is:	0.000/	·-	•	•		•

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Sta	and Harvest	Stu	ımpage	Harvest	State and Federal	Tax Payments:			
A <u>c</u>	ge <u>Volume</u>		<u>Price</u>	Revenue	Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%	Net Income After Tax	Accrued Interest on Net	Total <u>Income</u>
40	3.42 (Cords)	\$	33	\$114	(\$8)	- (\$40)	\$106 \$66	- \$0	- \$66
40	9.78	\$	374	\$3,657	(\$256)	<del>-</del>	\$3,401	· <u>-</u>	· -
	(MBF Doyle	)				(\$1,280)	\$2,121	\$0	\$2,121
Total:		_		\$3,771	(\$264)	(\$1,320)	\$2,187	\$0	\$2,187

#### **DELTA HARDWOOD**

Step 3 - Estimated Timberland Value per Acre

1. Total Income including	g accrued interest on net thinning income to final harvest:	\$2,187		
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	\$0		
<ol><li>Net income before pro</li></ol>	pperty tax:	\$2,187		
4. Present value of net income before property tax:				
<ol><li>Annual ad valorem pro</li></ol>	operty taxes:			
Property tax rate:	50 mills @ 20% assessment ratio	1.00%		
Annual property tax pa	Annual property tax payment:			
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.56)		
Total property tax pay	ments per harvest cycle:	(\$22)		
Accrued interest on or	ut-of-pocket tax payments per harvest cycle:	\$142		
6. Land value after prope	erty tax (adj. for income tax deduction):	\$86		

Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land

		Total Tax I	Payments:	Out-of-P	ocket Expenses	
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$34	-	\$22	\$142	\$164
Subtotal:		\$34	-	\$22	\$142	\$164
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$264	-	\$172	-	\$172
Federal Income Tax on harvest revenue @	35.0%	-	\$1,320	\$1,320	-	\$1,320
Subtotal:		\$264	\$1,320	\$1,492	-	\$1,492
Totals:		\$298	\$1,320	\$1,514	\$142	\$1,656
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

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

<b>Delta Region:</b>	Type of	Age @		Product			Total Vol. @	Percent	Harvest
DCF Classification	Harvest	Harvest	<b>Species</b>	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

# **DELTA REGION TIMBER:**

Cap Rate= <u>8.00%</u>

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$85	\$85	0%
2	\$95	\$95	0%
3	\$90	\$95	6%
4	\$100	\$105	5%
5	\$80	\$85	6%
6	\$100	\$100	0%
7	\$85	\$90	6%
8	\$95	\$100	5%
9	\$105	\$110	5%
10	\$95	\$95	0%
11	\$110	\$115	5%
12	\$115	\$115	0%
13	\$130	\$130	0%
14	\$125	\$130	4%
15	\$120	\$120	0%
16	\$100	\$105	5%
17	\$95	\$95	0%
18	\$65	\$65	0%
			3%

# **OUACHITA**

# **CROP**

	AVERAGE SOYBEAN BUSHEL PER	10 YEAR AVG OF PRICES RECEIVED BY			CAPITALI-	ROUNDED TO	OLD RATE ROUNDED TO THE NEAREST		
	ACRE	FARMERS	SUM	75/25 SPLIT	ZATION RATE	\$5	\$5	DIFF	% DIFF
					8.25%				
ACD 1	39	\$10.82	\$421.98	\$105.50	\$1,278.73	\$1,280	\$1,280	<b>\$0</b>	0%
ACD 2	31	\$10.82	\$335.42	\$83.86	\$1,016.42	\$1,015	\$1,015	<b>\$0</b>	0%
ACD 3	18	\$10.82	\$194.76	\$48.69	\$590.18	\$590	\$590	<b>\$0</b>	0%
ACD 4	28	\$10.82	\$302.96	\$75.74	\$918.06	\$920	\$920	<b>\$0</b>	0%
ACD 5	18	\$10.82	\$194.76	\$48.69	\$590.18	\$590	\$590	<b>\$0</b>	0%
ACD 6	18	\$10.82	\$194.76	\$48.69	\$590.18	<b>\$590</b>	\$590	<b>\$0</b>	0%
ACD 7	28	\$10.82	\$302.96	\$75.74	\$918.06	<b>\$920</b>	\$920	<b>\$0</b>	0%
ACD 8	28	\$10.82	\$302.96	\$75.74	\$918.06	<b>\$920</b>	\$920	<b>\$0</b>	0%
ACD 9	18	\$10.82	\$194.76	\$48.69	\$590.18	\$590	\$590	<b>\$0</b>	0%
ACD 10	28	\$10.82	\$302.96	\$75.74	\$918.06	<b>\$920</b>	\$920	<b>\$0</b>	0%
ACD 11	15	\$10.82	\$162.30	\$40.58	\$491.82	\$490	\$490	<b>\$0</b>	0%
ACD 12	28	\$10.82	\$302.96	\$75.74	\$918.06	<b>\$920</b>	\$920	<b>\$0</b>	0%
ACD 13	20	\$10.82	\$216.40	\$54.10	\$655.76	\$655	\$655	<b>\$0</b>	0%
ACD 14	20	\$10.82	\$216.40	\$54.10	\$655.76	\$655	\$655	<b>\$0</b>	0%
ACD 15						\$345	\$345	<b>\$0</b>	0%
ACD 16						\$270	\$270	<b>\$0</b>	0%
ACD 17						\$210	\$210	<b>\$0</b>	0%
ACD 18						\$125	\$125	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DIVISION

# **OUACHITA**

# **PASTURE**

						OLD RATE		
		AVO ¢ DED		CAPITAL-	DOUNDED TO	ROUNDED TO		
	A1184	AVG \$ PER	TOTAL	IZATION	ROUNDED TO	THE NEAREST	DIEE	0/ DIFF
	AUM	AUM	TOTAL	RATE	NEAREST \$5	\$5	DIFF	% DIFF
				8.00%				
ACD 1	8.4	\$2.91	\$24.44	\$305.55	\$305	\$300	<b>\$5</b>	2%
ACD 2	7.7	\$2.91	\$22.41	\$280.09	\$280	\$275	<b>\$5</b>	2%
ACD 3	5.1	\$2.91	\$14.84	\$185.51	\$185	\$185	<b>\$0</b>	0%
ACD 4	6.3	\$2.91	\$18.33	\$229.16	\$230	\$225	<b>\$5</b>	2%
ACD 5	5.1	\$2.91	\$14.84	\$185.51	\$185	\$185	<b>\$0</b>	0%
ACD 6	4.2	\$2.91	\$12.22	\$152.78	\$155	\$150	<b>\$5</b>	3%
ACD 7	6.7	\$2.91	\$19.50	\$243.71	\$245	\$240	<b>\$5</b>	2%
ACD 8	6.1	\$2.91	\$17.75	\$221.89	\$220	\$220	<b>\$0</b>	0%
ACD 9	3.9	\$2.91	\$11.35	\$141.86	\$140	\$140	<b>\$0</b>	0%
ACD 10	6.7	\$2.91	\$19.50	\$243.71	\$245	\$240	<b>\$5</b>	2%
ACD 11	4.2	\$2.91	\$12.22	\$152.78	\$155	\$150	<b>\$5</b>	3%
ACD 12	6.9	\$2.91	\$20.08	\$250.99	\$250	\$250	<b>\$0</b>	0%
ACD 13	6.4	\$2.91	\$18.62	\$232.80	\$235	\$230	<b>\$5</b>	2%
ACD 14	5.1	\$2.91	\$14.84	\$185.51	\$185	\$185	<b>\$0</b>	0%
ACD 15	4.2	\$2.91	\$12.22	\$152.78	\$155	\$150	<b>\$5</b>	3%
ACD 16	4.2	\$2.91	\$12.22	\$152.78	\$155	\$150	<b>\$5</b>	3%
ACD 17	4.2	\$2.91	\$12.22	\$152.78	\$155	\$150	<b>\$5</b>	3%
ACD 18					\$75	\$75	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DIVISION

#### **OUACHITA PINEHIGHSITE**

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

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

Out-of-Pock	ket Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
0	Prep./Plant	\$190	No	\$0	\$190	\$0	\$1,904	\$2,094
3	Spray	\$71	Yes	\$25	\$46	\$190	\$352	\$184
8	PCT	\$148	Yes	\$52	\$96	\$249	\$462	\$258
18	Fert.	\$85	Yes	\$30	\$55	\$48	\$89	\$66
26	Fert.		Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$493	-	\$106	\$387	\$486	\$2,807	\$2,602
Annual Expense	es:							
Adminstration	/management.:	\$10	Yes	\$4	\$7	\$32	\$60	\$31
Subtotal (30 yrs	s.):	\$300	"	\$105	\$195	\$334	\$619	\$376
Total:		\$793	-	\$211	\$582	\$820	\$3,427	\$2,978
	**Interest rate	used in computations is:	8 N%	-				

<sup>\*\*</sup>Interest rate used in computations is:

8.0%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand	Harvest	Stu	mpage	Harvest	State and Federal	Tax Payments:				
Age	<u>Volume</u>	<u> </u>	Price_	Revenue	Arkansas State	Fed. Income		Net Income	Accrued	Total
					Income Tax@ 7%	<u>Tax @ 35%</u>		After Tax	Interest on Net	Income
16	9.21	\$	19	\$176	(\$12)	-		\$164	-	-
	(Cords)					(\$62)	1	\$102	\$211	\$313
23	3.78	\$	268	\$1,012	(\$71)	-		\$942	-	-
	(MBF Doyle)					(\$354)	1	\$587	\$441	\$1,028
30	16.45	\$	268	\$4,402	(\$308)	-		\$4,094	-	-
	(MBF Doyle)					(\$1,368)	1	\$2,726	\$0	\$2,726
Total:		-		\$5,591	(\$391)	(\$1,784)		\$2,828	\$652	\$4,067

Less Site Prep/Plant Expense and adjusted for fed. tax deduction.

#### **OUACHITA PINEHIGHSITE**

Step 3 - Estimated Timberland Value per Acre

Total Income including	g accrued interest on net thinning income to final harvest:	\$4,067
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	(\$2,978)
<ol><li>Net income before pro</li></ol>	pperty tax:	\$1,089
<ol><li>Present value of net ir</li></ol>	\$109	
<ol><li>Annual ad valorem pro</li></ol>	operty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pa	ayment:	(\$1.01)
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.65)
Total property tax pay	ments per harvest cycle:	(\$20)
Accrued interest on or	ut-of-pocket tax payments per harvest cycle:	\$62
6. Land value after prope	erty tax (adj. for income tax deduction):	\$101

Step 4 - Tax Burden on High Site Pine Forest Land

		Total Tax I	Payments:	Out-of-P	Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>	
Cost-increasing:							
Property taxes on land:		\$30	-	\$20	\$62	\$82	
Subtotal:		\$30	-	\$20	\$62	\$82	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$391	-	\$254	-	\$254	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,784	\$1,784	-	\$1,784	
Subtotal:		\$391	\$1,784	\$2,038	-	\$2,038	
Totals:		\$421	\$1,784	\$2,058	\$62	\$2,120	
Tax burden as percent of gross revenues:		7.5%	31.9%	36.8%	1.1%	37.9%	

#### **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):

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expense	es:							
Adminstration/	management.:	\$8	Yes	\$3	\$5	\$31	\$57	\$29
Subtotal (32 yrs	.):	\$256	11	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
	**Interest rate	used in computations is:	8.0%	•		•	•	

<sup>\*</sup>Interest rate used in computations is:

Step. 2 - Revenues and Federal and State Tax Treatment

Stand	Harvest	Stumpage	Harvest	State and Federal 1	ax Payments:			
Age	<u>Volume</u>	<u>Price</u>	Revenue	Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%	Net Income <u>After Tax</u>	Accrued Interest on Net	Total <u>Income</u>
18	8.03	\$19.13	\$154	(\$11)	-	\$143	-	-
	(Cords)				(\$54) <sup>1</sup>	\$89	\$184	\$273
32	13.59	\$267.63	\$3,637	(\$255)	-	\$3,383	-	-
	(MBF Doyle)				(\$1,273)	\$2,110	\$0	\$2,110
otal:		-	\$3,791	(\$265)	(\$1,327)	\$2,199	\$184	\$2,383

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:	\$2,383
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before pro	\$2,024	
4. Present value of net in	\$170	
5. Annual ad valorem pro	perty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pa	yment:	(\$1.57)
Annual property tax pa	yment adjusted for fed. inc. tax deduction:	(\$1.02)
Total property tax payr	ments per harvest cycle:	(\$33)
Accrued interest on ou	t-of-pocket tax payments per harvest cycle:	\$119
6. Land value after prope	rty tax (adj. for income tax deduction):	\$157

Step 4 - Tax Burden on Medium Site Pine Forest Land

		Total Tax	Payments:	Out-of-P	Out-of-Pocket Expenses	
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$50	-	\$33	\$119	\$152
Subtotal:		\$50	-	\$33	\$119	\$152
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$265	-	\$172	-	\$172
Federal Income Tax on harvest revenue @	35.0%	-	\$1,327	\$1,327	-	\$1,327
Subtotal:		\$265	\$1,327	\$1,499	-	\$1,499
Totals:		\$316	\$1,327	\$1,532	\$119	\$1,651
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.2%	43.6%

#### **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):

Out-of-Poc	ket Expenses:		-	•				
Age	Activity	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expens								
Adminstration	/management.:	<b>\$</b> 0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yr:	s.):	\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8.0%	•		•		

<sup>\*</sup>Interest rate used in computations is:

Step. 2 - Revenues and Federal and State Tax Treatment

Stand	Harvest	Stumpage	Harvest	State and Federal T	ax Payments:			
Age	<u>Volume</u>	<u>Price</u>	Revenue	Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%	Net Income <u>After Tax</u>	Accrued Interest on Net	Total <u>Income</u>
	(Cordo)	\$19	\$0	\$0	-	\$0 \$0	- \$0	- ¢0
34	(Cords) 11.16	\$268	\$2,986	(\$209)	\$0	\$0 \$2,777	φ0 -	\$0 -
	(MBF Doyle)				(\$1,045)	\$1,732	\$0	\$1,732
tal:		-	\$2,986	(\$209)	(\$1,045)	\$1,732	\$0	\$1,732

#### **OUACHITA PINELOWSITE**

Step 3 - Estimated Timberland Value per Acre

1. Total Income including	. Total Income including accrued interest on net thinning income to final harvest:		
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	\$0	
3. Net income before pro	perty tax:	\$1,732	
4. Present value of net in	come before property tax:	\$122	
5. Annual ad valorem pro	pperty taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%	
Annual property tax pa	syment:	(\$1.13)	
Annual property tax pa	syment adjusted for fed. inc. tax deduction:	(\$0.73)	
Total property tax payr	ments per harvest cycle:	(\$25)	
Accrued interest on ou	ıt-of-pocket tax payments per harvest cycle:	\$105	
6. Land value after prope	erty tax (adj. for income tax deduction):	\$113	

Step 4 - Tax Burden on Low Site Pine Forest Land

		Total Tax	Payments:	Out-of-P		
		<u>State</u>	<u>Federal</u>	Taxes	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$38	-	\$25	\$105	\$130
Subtotal:		\$38	-	\$25	\$105	\$130
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$209	-	\$136	-	\$136
Federal Income Tax on harvest revenue @	35.0%	-	\$1,045	\$1,045	-	\$1,045
Subtotal:		\$209	\$1,045	\$1,181	-	\$1,181
Totals:		\$247	\$1,045	\$1,206	\$105	\$1,311
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):

Out-of-Pock	ket Expenses:		-					
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Interest on		Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expens	es:							
Adminstration	/management.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs	s.):	\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest reta	used in computations is:	9 000/					

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

	Stand	Harvest	Stu	mpage	Harvest	State and Federal	Tax Payments:			
	Age	<u>Volume</u>	<u> </u>	Price_	Revenue	Arkansas State	Fed. Income	Net Income	Accrued	Total
						Income Tax@ 7%	Tax @ 35%	After Tax	Interest on Net	Income
	40	3.42	\$	40	\$136	(\$10)	-	\$126	-	-
		(Cords)					(\$48)	\$79	\$0	\$79
	40	9.78	\$	387	\$3,784	(\$265)	-	\$3,519	-	-
		(MBF Doyle)					(\$1,325) <sup>1</sup>	\$2,195	\$0	\$2,195
Total:			-		\$3,920	(\$274)	(\$1,372)	\$2,274	\$0	\$2,274

#### **OUACHITA HARDWOOD**

Step 3 - Estimated Timberland Value per Acre

1. Total Income including	1. Total Income including accrued interest on net thinning income to final harvest:			
2. Out-of-pocket expense	. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:			
3. Net income before property tax:				
4. Present value of net in	value of net income before property tax:			
5. Annual ad valorem pro	perty taxes:			
Property tax rate:	50 mills @ 20% assessment ratio	1.00%		
Annual property tax pa	yment:	(\$0.89)		
Annual property tax pa	yment adjusted for fed. inc. tax deduction:	(\$0.58)		
Total property tax payr	nents per harvest cycle:	(\$23)		
Accrued interest on ou	t-of-pocket tax payments per harvest cycle:	\$148		
6. Land value after prope	rty tax (adj. for income tax deduction):	\$89		

Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land

		Total Tax	Payments:	Out-of-P		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$36	-	\$23	\$148	\$171
Subtotal:		\$36	-	\$23	\$148	\$171
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$274	-	\$178	-	\$178
Federal Income Tax on harvest revenue @	35.0%	-	\$1,372	\$1,372	-	\$1,372
Subtotal:		\$274	\$1,372	\$1,550	-	\$1,550
Totals:		\$310	\$1,372	\$1,574	\$148	\$1,721
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

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

Ouachita Region	Type of	Age @		Product			Total Vol. @	Percent	Harvest
DCF Classification	Harvest	Harvest	<b>Species</b>	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= <u>8.00%</u>

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$85	\$90	6%
2	\$145	\$145	0%
3	\$85	\$90	6%
4	\$105	\$105	0%
5	\$85	\$85	0%
6	\$110	\$115	5%
7	\$95	\$100	5%
8	\$95	\$100	5%
9	\$120	\$120	0%
10	\$95	\$95	0%
11	\$120	\$120	0%
12	\$140	\$140	0%
13	\$140	\$145	4%
14	\$135	\$135	0%
15	\$125	\$130	4%
16	\$135	\$135	0%
17	\$95	\$95	0%
18	\$70	\$70	0%
			2%

# **OZARK**

# **CROP**

	AVERAGE SOYBEAN BUSHEL PER	10 YEAR AVG OF PRICES RECEIVED BY			CAPITALI-	ROUNDED TO	OLD RATE ROUNDED TO THE NEAREST		
	ACRE	FARMERS	SUM	75/25 SPLIT	ZATION RATE	\$5	\$5	DIFF	% DIFF
					8.25%				
ACD 1	38	\$10.82	\$411.16	\$102.79	\$1,245.94	\$1,245	\$1,245	<b>\$0</b>	0%
ACD 2	31	\$10.82	\$335.42	\$83.86	\$1,016.42	\$1,015	\$1,015	<b>\$0</b>	0%
ACD 3	23	\$10.82	\$248.86	\$62.22	\$754.12	\$755	\$755	<b>\$0</b>	0%
ACD 4	29	\$10.82	\$313.78	\$78.45	\$950.85	\$950	\$950	<b>\$0</b>	0%
ACD 5	23	\$10.82	\$248.86	\$62.22	\$754.12	\$755	\$755	<b>\$0</b>	0%
ACD 6	15	\$10.82	\$162.30	\$40.58	\$491.82	\$490	\$490	<b>\$0</b>	0%
ACD 7	28	\$10.82	\$302.96	\$75.74	\$918.06	\$920	\$920	<b>\$0</b>	0%
ACD 8	28	\$10.82	\$302.96	\$75.74	\$918.06	\$920	\$920	<b>\$0</b>	0%
ACD 9	15	\$10.82	\$162.30	\$40.58	\$491.82	\$490	\$490	<b>\$0</b>	0%
ACD 10	28	\$10.82	\$302.96	\$75.74	\$918.06	\$920	\$920	<b>\$0</b>	0%
ACD 11	15	\$10.82	\$162.30	\$40.58	\$491.82	\$490	\$490	<b>\$0</b>	0%
ACD 12	28	\$10.82	\$302.96	\$75.74	\$918.06	\$920	\$920	<b>\$0</b>	0%
ACD 13	20	\$10.82	\$216.40	\$54.10	\$655.76	\$655	\$655	<b>\$0</b>	0%
ACD 14	20	\$10.82	\$216.40	\$54.10	\$655.76	\$655	\$655	<b>\$0</b>	0%
ACD 15						\$345	\$345	<b>\$0</b>	0%
ACD 16						\$270	\$270	<b>\$0</b>	0%
ACD 17						\$210	\$210	<b>\$0</b>	0%
ACD 18						\$125	\$125	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

### **OZARK**

### **PASTURE**

						OLD RATE		
		AVO È DED		CADITAL	DOUNDED TO	ROUNDED TO		
	AUM	AVG \$ PER AUM	TOTAL	CAPITAL- IZATION RATE	ROUNDED TO NEAREST \$5	THE NEAREST \$5	DIFF	% DIFF
	AUW	AUN	IOIAL	8.00%	NEARES1 35	ФЭ	DIFF	% DIFF
ACD 1	9.8	\$2.91	\$28.52	\$356.48	\$355	\$350	<b>\$</b> 5	1%
ACD 2	8	\$2.91	\$23.28	\$291.00	\$290	\$285	\$5	2%
			•	·				
ACD 3	6.1	\$2.91	\$17.75	\$221.89	\$220	\$220	<b>\$0</b>	0%
ACD 4	6.3	\$2.91	\$18.33	\$229.16	\$230	\$225	<b>\$5</b>	2%
ACD 5	6.6	\$2.91	\$19.21	\$240.08	\$240	\$235	<b>\$5</b>	2%
ACD 6	4.4	\$2.91	\$12.80	\$160.05	<b>\$160</b>	\$160	<b>\$0</b>	0%
ACD 7	6.5	\$2.91	\$18.92	\$236.44	\$235	\$235	<b>\$0</b>	0%
ACD 8	6.6	\$2.91	\$19.21	\$240.08	\$240	\$235	<b>\$5</b>	2%
ACD 9	4.2	\$2.91	\$12.22	\$152.78	<b>\$155</b>	\$150	<b>\$5</b>	3%
ACD 10	6.5	\$2.91	\$18.92	\$236.44	\$235	\$235	<b>\$0</b>	0%
ACD 11	3.1	\$2.91	\$9.02	\$112.76	<b>\$115</b>	\$110	<b>\$5</b>	5%
ACD 12	7.8	\$2.91	\$22.70	\$283.73	\$285	\$280	<b>\$5</b>	2%
ACD 13	6.6	\$2.91	\$19.21	\$240.08	\$240	\$235	<b>\$5</b>	2%
ACD 14	5.2	\$2.91	\$15.13	\$189.15	\$190	\$185	<b>\$5</b>	3%
ACD 15	4.4	\$2.91	\$12.80	\$160.05	<b>\$160</b>	\$160	<b>\$0</b>	0%
ACD 16	3.7	\$2.91	\$10.77	\$134.59	\$135	\$135	<b>\$0</b>	0%
ACD 17	3.7	\$2.91	\$10.77	\$134.59	<b>\$135</b>	\$135	<b>\$0</b>	0%
ACD 18					<b>\$75</b>	\$75	<b>\$0</b>	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):

Out-of-Poc	ket Expenses:								
Age	<u>Activity</u>	<u>Ex</u>	<u>pense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
				<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
0	Prep./Plant	\$	190	No	\$0	\$190	\$0	\$1,904	\$2,094
3	Spray	\$	71	Yes	\$25	\$46	\$190	\$352	\$184
8	PCT	\$	148	Yes	\$52	\$96	\$249	\$462	\$258
18	Fert.	\$	85	Yes	\$30	\$55	\$48	\$89	\$66
26	Fert.			Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:			\$493	-	\$106	\$387	\$486	\$2,807	\$2,602
Annual Expens	ses:								
Adminstration	/management.:		\$10	Yes	\$4	\$7	\$32	\$60	\$31
Subtotal (30 yr	s.):		\$300	"	\$105	\$195	\$334	\$619	\$376
Total:			\$793	-	\$211	\$582	\$820	\$3,427	\$2,978
	**Interest reta	1100	d in computations is:	8 NO%		-	-		

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

-	Stand	Harvest	Stumpage	Harvest	State and Federal	Tax Payments:				
_	<u>Age</u>	<u>Volume</u>	<u>Price</u>	Revenue	Arkansas State	Fed. Income		Net Income	Accrued	Total
					Income Tax@ 7%	Tax @ 35%		After Tax	Interest on Net	Income
	16	9.21	\$17.15	\$158	(\$11)	-		\$147	-	-
		(Cords)				(\$55)	1	\$92	\$189	\$281
	23	3.78	\$240.35	\$909	(\$64)	-		\$846	-	-
		(MBF Doyle)				(\$318)	1	\$527	\$396	\$923
	30	16.45	\$240.35	\$3,953	(\$277)	-		\$3,676	-	-
		(MBF Doyle)				(\$1,211)	1	\$2,465	\$0	\$2,465
Total:			-	\$5,020	(\$351)	(\$1,585)		\$3,084	\$585	\$3,669

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

#### **OZARK PINEHIGHSITE**

Step 3 - Estimated Timberland Value per Acre

(\$2,978)
\$692
\$69
1.00%
(\$0.64)
(\$0.41)
(\$12)
\$40

Step 4 - Tax Burden on High Site Pine Forest Land

	<u> </u>	Total Tax	Payments:	Out-of-P	ocket Expenses	
		<u>State</u>	Federal	Taxes	Accrued Interest	<u>Total</u>
Cost-increasing:			<del></del>			<u></u>
Property taxes on land:		\$19	-	\$12	\$40	\$52
Subtotal:		\$19	-	\$12	\$40	\$52
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$351	-	\$228	-	\$228
Federal Income Tax on harvest revenue @	35.0%	-	\$1,585	\$1,585	-	\$1,585
ubtotal:		\$351	\$1,585	\$1,813	-	\$1,813
otals:		\$371	\$1,585	\$1,825	\$40	\$1,865
Tax burden as percent of gross revenues:		7.4%	31.6%	36.4%	0.8%	37.1%

#### **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):

Out-of-Pocke	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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	3:							
Adminstration/n	nanagement.:	\$8	Yes	\$3	\$5	\$31	\$57	\$29
Subtotal (32 yrs.)	):	\$256	"	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
	**Interest rete	used in computations is:	8 UU%		-	-		

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

Stan	nd Harvest	Stumpage	Harvest	State and Federal	ax Payments:			
Age	<u>e Volume</u>	<u>Price</u>	Revenue	Arkansas State Income Tax@ 7%	Fed. Income Income Tax@ 35%	Net Income <u>After Tax</u>	Accrued Interest on Net	Total <u>Income</u>
18	8.03	\$17.15	\$138	(\$10)	-	\$128	-	-
	(Cords)				(\$48) <sup>1</sup>	\$80	\$165	\$245
32	13.59	\$240.35	\$3,266	(\$229)	-	\$3,038	-	-
	(MBF Doyle)				(\$1,143) <sup>1</sup>	\$1,895	\$0	\$1,895
Total:		-	\$3,404	(\$238)	(\$1,191)	\$1,974	\$165	\$2,139

<sup>&</sup>lt;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	g accrued interest on net thinning income to final harvest:	\$2,139					
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	(\$358)					
<ol><li>Net income before pro</li></ol>	3. Net income before property tax:						
4. Present value of net in	\$149						
<ol><li>Annual ad valorem pro</li></ol>	operty taxes:						
Property tax rate:	50 mills @ 20% assessment ratio	1.00%					
Annual property tax pa	(\$1.38)						
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.90)					
Total property tax pay	ments per harvest cycle:	(\$29)					
Accrued interest on or	Accrued interest on out-of-pocket tax payments per harvest cycle:						
6. Land value after prope	erty tax (adj. for income tax deduction):	\$138					

Step 4 - Tax Burden on Medium Site Pine Forest Land

		Total Tax	Payments:	Out-of-P	ocket Expenses	
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$44	-	\$29	\$105	\$134
Subtotal:		\$44	-	\$29	\$105	\$134
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$238	-	\$155	-	\$155
Federal Income Tax on harvest revenue @	35.0%	-	\$1,191	\$1,191	-	\$1,191
Subtotal:		\$238	\$1,191	\$1,346	-	\$1,346
Totals:		\$282	\$1,191	\$1,375	\$105	\$1,480
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.1%	43.5%

#### **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):

Out-of-Pock	et Expenses:			•				•
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expense	es:							
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 UU%	-				-

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

Stand	Harvest	Stumpage	Harvest	State and Federal	ax Payments:			
Age	<u>Volume</u>	<u>Price</u>	Revenue	Arkansas State	Fed. Income	Net Income	Accrued	Total
				Income Tax@ 7%	Income Tax@ 35%	After Tax	Interest on Net	<u>Income</u>
			\$0	\$0	-	\$0	-	-
					\$0	\$0	\$0	\$0
34	11.16	\$240	\$2,682	(\$188)		\$2,494	-	-
	(MBF Doyle)				(\$939)	\$1,555	\$0	\$1,555
otal:		_	\$2,682	(\$188)	(\$939)	\$1,555	\$0	\$1,555

<sup>&</sup>lt;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	g accrued interest on net thinning income to final harvest:	\$1,555				
2. Out-of-pocket expens	es (silvicultural activities and taxes) and accrued interest:	\$0				
<ol><li>Net income before pro</li></ol>	operty tax:	\$1,555				
<ol><li>Present value of net in</li></ol>	\$110					
<ol><li>Annual ad valorem pre</li></ol>	operty taxes:					
Property tax rate:	50 mills @ 20% assessment ratio	1.00%				
Annual property tax page	(\$1.01)					
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.66)				
Total property tax pay	ments per harvest cycle:	(\$22)				
Accrued interest on or	Accrued interest on out-of-pocket tax payments per harvest cycle:					
6. Land value after prope	erty tax (adj. for income tax deduction):	\$101				

Step 4 - Tax Burden on Low Site Pine Forest Land

•		Total Tax	Payments:	Out-of-P	ocket Expenses	
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$34	-	\$22	\$94	\$117
Subtotal:		\$34	-	\$22	\$94	\$117
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$188	-	\$122	-	\$122
Federal Income Tax on harvest revenue @	35.0%	-	\$939	\$939	-	\$939
Subtotal:		\$188	\$939	\$1,061	-	\$1,061
Totals:		\$222	\$939	\$1,083	\$94	\$1,178
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):

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expense	es:							
Adminstration/	management.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs	5.):	\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
•	**Interest rate	used in computations is:	8 UU%	·	•			

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

St	tand	Harvest	Stu	mpage	Harvest	State and Federal	Γ <u>ax Payments:</u>			
	<u>Age</u>	<u>Volume</u>	<u> </u>	<u>Price</u>	Revenue	Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%	Net Income After Tax	Accrued Interest on Net	Total <u>Income</u>
4	.0	3.42 (Cords)	\$	27	\$92	(\$6)	- (\$32)	\$86 \$53	- \$0	- \$53
4	.0	9.78	\$	361	\$3,530	(\$247)	· · · · · · · · · · · · · · · · · · ·	\$3,283	-	-
		(MBF Doyle)					(\$1,236)	\$2,048	\$0	\$2,048
Total:			_		\$3,622	(\$254)	(\$1,268)	\$2,101	\$0	\$2,101

#### OZARK HARDWOOD

Step 3 - Estimated Timberland Value per Acre

1. Total Income including	g accrued interest on net thinning income to final harvest:	\$2,101
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	\$0
<ol><li>Net income before pro</li></ol>	pperty tax:	\$2,101
<ol><li>Present value of net ir</li></ol>	ncome before property tax:	\$89
<ol><li>Annual ad valorem pro</li></ol>	operty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pa	ayment:	(\$0.83)
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.54)
Total property tax pay	ments per harvest cycle:	(\$21)
Accrued interest on or	ut-of-pocket tax payments per harvest cycle:	\$136
6. Land value after prope	erty tax (adj. for income tax deduction):	\$83

Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land

		Total Tax I	Payments:	Out-of-P	ocket Expenses	
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$33	-	\$21	\$136	\$158
Subtotal:		\$33	-	\$21	\$136	\$158
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$254	-	\$165	-	\$165
Federal Income Tax on harvest revenue @	35.0%	-	\$1,268	\$1,268	-	\$1,268
Subtotal:		\$254	\$1,268	\$1,433	-	\$1,433
Totals:		\$287	\$1,268	\$1,454	\$136	\$1,591
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

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

Ozark Region	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	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= <u>8.00%</u>

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$80	\$85	6%
2	\$110	\$115	5%
3	\$100	\$105	5%
4	\$100	\$105	5%
5	\$85	\$90	6%
6	\$110	\$110	0%
7	\$85	\$90	6%
8	\$100	\$105	5%
9	\$105	\$110	5%
10	\$70	\$70	0%
11	\$105	\$110	5%
12	\$120	\$125	4%
13	\$120	\$120	0%
14	\$110	\$110	0%
15	\$110	\$110	0%
16	\$105	\$110	5%
17	\$65	\$65	0%
18	\$60	\$60	0%
			5%

### SOUTHWEST

## **CROP**

	AVERAGE SOYBEAN BUSHEL PER ACRE	10 YEAR AVERAGE OF PRICES RECEIVED BY FARMERS			CAPITALI-	_	THE NEAREST		
			SUM	75/25 SPLIT	ZATION RATE 8.25%	\$5	\$5	DIFF	% DIFF
ACD 1	36	\$10.82	\$389.52	\$97.38	\$1,180.36	\$1,180	\$1,180	<b>\$0</b>	0%
ACD 2	31	\$10.82	\$335.42	\$83.86	\$1,016.42	\$1,015	\$1,015	<b>\$0</b>	0%
ACD 3	20	\$10.82	\$216.40	\$54.10	\$655.76	\$655	\$655	<b>\$0</b>	0%
ACD 4	27	\$10.82	\$292.14	\$73.04	\$885.27	\$885	\$885	<b>\$0</b>	0%
ACD 5	20	\$10.82	\$216.40	\$54.10	\$655.76	\$655	\$655	<b>\$0</b>	0%
ACD 6	15	\$10.82	\$162.30	\$40.58	\$491.82	\$490	\$490	<b>\$0</b>	0%
ACD 7	29	\$10.82	\$313.78	\$78.45	\$950.85	\$950	\$950	<b>\$0</b>	0%
ACD 8	29	\$10.82	\$313.78	\$78.45	\$950.85	\$950	\$950	<b>\$0</b>	0%
ACD 9	15	\$10.82	\$162.30	\$40.58	\$491.82	\$490	\$490	<b>\$0</b>	0%
ACD 10	29	\$10.82	\$313.78	\$78.45	\$950.85	\$950	\$950	<b>\$0</b>	0%
ACD 11	15	\$10.82	\$162.30	\$40.58	\$491.82	\$490	\$490	<b>\$0</b>	0%
ACD 12	27	\$10.82	\$292.14	\$73.04	\$885.27	\$885	\$885	<b>\$0</b>	0%
ACD 13	21	\$10.82	\$227.22	\$56.81	\$688.55	\$690	\$690	<b>\$0</b>	0%
ACD 14	21	\$10.82	\$227.22	\$56.81	\$688.55	\$690	\$690	<b>\$0</b>	0%
ACD 15						\$345	\$345	<b>\$0</b>	0%
ACD 16						\$270	\$270	<b>\$0</b>	0%
ACD 17						\$210	\$210	<b>\$0</b>	0%
ACD 18						\$125	\$125	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

### SOUTHWEST

## **PASTURE**

		AVG \$ PER		CAPITAL-	ROUNDED TO	OLD RATE ROUNDED TO THE NEAREST		
	AUM	AUM	TOTAL	IZATION RATE	NEAREST \$5	\$5	DIFF	% DIFF
				8.00%				
ACD 1	9.1	\$2.91	\$26.48	\$331.01	\$330	\$325	<b>\$5</b>	2%
ACD 2	8.1	\$2.91	\$23.57	\$294.64	\$295	\$290	<b>\$5</b>	2%
ACD 3	6.1	\$2.91	\$17.75	\$221.89	\$220	\$220	<b>\$0</b>	0%
ACD 4	7.2	\$2.91	\$20.95	\$261.90	\$260	\$260	<b>\$0</b>	0%
ACD 5	5.2	\$2.91	\$15.13	\$189.15	\$190	\$185	<b>\$5</b>	3%
ACD 6	5.2	\$2.91	\$15.13	\$189.15	\$190	\$185	<b>\$5</b>	3%
ACD 7	6.8	\$2.91	\$19.79	\$247.35	\$245	\$245	<b>\$0</b>	0%
ACD 8	5.5	\$2.91	\$16.01	\$200.06	\$200	\$195	<b>\$5</b>	3%
ACD 9	4	\$2.91	\$11.64	\$145.50	\$145	\$145	<b>\$0</b>	0%
ACD 10	5	\$2.91	\$14.55	\$181.88	\$180	\$180	<b>\$0</b>	0%
ACD 11	4.5	\$2.91	\$13.10	\$163.69	<b>\$165</b>	\$160	<b>\$5</b>	3%
ACD 12	7.9	\$2.91	\$22.99	\$287.36	\$285	\$285	<b>\$0</b>	0%
ACD 13	7.2	\$2.91	\$20.95	\$261.90	\$260	\$260	<b>\$0</b>	0%
ACD 14	6	\$2.91	\$17.46	\$218.25	\$220	\$215	<b>\$5</b>	2%
ACD 15	4.8	\$2.91	\$13.97	\$174.60	\$145	\$145	<b>\$0</b>	0%
ACD 16	3	\$2.91	\$8.73	\$109.13	\$110	\$110	<b>\$0</b>	0%
ACD 17	3	\$2.91	\$8.73	\$109.13	\$110	\$110	<b>\$0</b>	0%
ACD 18					<b>\$75</b>	\$75	<b>\$0</b>	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - 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):

Out-of-Pocks	et Expenses:			<u> </u>	•				
Age	Activity	Ex	<u>pense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
	<del></del> -		<del></del>	<u>Deductible</u>	<u>Benefit</u>	<u>excl. Taxes</u>	Fed. Benefit	Net Out.	at Harvest
0	Prep./Plant	\$	190	No	\$0	\$190	\$0	\$1,904	\$2,094
3	Spray	\$	71	Yes	\$25	\$46	\$190	\$352	\$184
8	PCT	\$	148	Yes	\$52	\$96	\$249	\$462	\$258
18	Fert.	\$	85	Yes	\$30	\$55	\$48	\$89	\$66
26	Fert.			Yes	\$0	\$0	\$0	\$0	\$0
Subtotal:			\$493	-	\$106	\$387	\$486	\$2,807	\$2,602
Annual Expense	s:								
Adminstration/r	management.:		\$10	Yes	\$4	\$7	\$32	\$60	\$31
Subtotal (30 yrs.	):		\$300	"	\$105	\$195	\$334	\$619	\$376
Total:			\$793	-	\$211	\$582	\$820	\$3,427	\$2,978
	**Interest rate	e use	d in computations is:	8.00%					

<sup>\*</sup>Interest rate used in computations is:

	Stand	Harvest	Stu	ımpage	Harvest	State and Federal	Tax Payments:				
	Age	<u>Volume</u>		<u>Price</u>	Revenue	Arkansas State	Fed. Income		Net Income	Accrued	Total
						Income Tax@ 7%	Tax @ 35%		After Tax	Interest on Net	<u>Income</u>
	16	9.21	\$	19	\$176	(\$12)	-		\$164	-	-
		(Cords)					(\$62)	1	\$102	\$211	\$313
	23	3.78	\$	268	\$1,012	(\$71)	-		\$942	-	-
		(MBF Doyle)					(\$354)	1	\$587	\$441	\$1,028
	30	16.45	\$	268	\$4,402	(\$308)	-		\$4,094	-	-
		(MBF Doyle)					(\$1,368)	1	\$2,726	\$0	\$2,726
Total:	:		-		\$5,591	(\$391)	(\$1,784)		\$2,828	\$652	\$4,067

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

### SOUTHWEST PINEHIGHSITE

Step 3 - Estimated	l Timberland	Value	per Acre
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1. Total Income including	accrued interest on net thinning income to final harvest:	\$4,067				
<ol><li>Out-of-pocket expense</li></ol>	es (silvicultural activities and taxes) and accrued interest:	(\$2,978)				
<ol><li>Net income before proj</li></ol>	perty tax:	\$1,089				
4. Present value of net in	come before property tax:	\$109				
5. Annual ad valorem pro	perty taxes:					
Property tax rate:	50 mills @ 20% assessment ratio	1.00%				
Annual property tax pa	Annual property tax payment:					
Annual property tax pa	yment adjusted for fed. inc. tax deduction:	(\$0.65)				
Total property tax payn	nents per harvest cycle:	(\$20)				
Accrued interest on ou	t-of-pocket tax payments per harvest cycle:	\$62				
6. Land value after prope	rty tax (adj. for income tax deduction):	\$101				
o. Land value after prope	rty tax (auj. 101 income tax deduction).	\$1U1				

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>	Accrued Interest	<u>Total</u>
Cost-increasing: Property taxes on land: Subtotal:		\$30 \$30	- -	\$20 \$20	\$62 \$62	\$82 \$82
Revenue-reducing: Arkansas State Income Tax on harvest revenue @	7.0%	\$391	-	\$254	-	\$254
Federal Income Tax on harvest revenue @	35.0%	-	\$1,784	\$1,784	-	\$1,784
Subtotal:		\$391	\$1,784	\$2,038	-	\$2,038
Totals:		\$421	\$1,784	\$2,058	\$62	\$2,120
Tax burden as percent of gross revenues:		7.5%	31.9%	36.8%	1.1%	37.9%

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

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

Out-of-Poc	ket Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
_	_	-	<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expens	es:							
Adminstration	/management.:	\$8	Yes	\$3	\$5	\$31	\$57	\$29
Subtotal (32 yr	s.):	\$256	"	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
	**Interest ret	a used in computations is:	9 AA9/-					

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

	Stand	Harvest	Stumpage	Harvest	State and Federal	Tax Payments:			
	Age	<u>Volume</u>	Price	Revenue	Arkansas State	Fed. Income	Net Income	Accrued	Total
					Income Tax@ 7%	Tax @ 35%	After Tax	Interest on Net	Income
	18	8.03	\$19.13	\$154	(\$11)	-	\$143	-	-
		(Cords)				(\$54) <sup>1</sup>	\$89	\$184	\$273
	32	13.59	\$267.63	\$3,637	(\$255)	· · ·	\$3,383	-	-
		(MBF Doyle)				(\$1,273)	\$2,110	\$0	\$2,110
Total:			-	\$3,791	(\$265)	(\$1,327)	\$2,199	\$184	\$2,383

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:	\$2,383
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before pro	perty tax:	\$2,024
4. Present value of net in	come before property tax:	\$170
5. Annual ad valorem pro	perty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pa	lyment:	(\$1.57)
Annual property tax pa	lyment adjusted for fed. inc. tax deduction:	(\$1.02)
Total property tax payr	ments per harvest cycle:	(\$33)
Accrued interest on ou	it-of-pocket tax payments per harvest cycle:	\$119
6. Land value after prope	rty tax (adj. for income tax deduction):	\$157

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>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$50	-	\$33	\$119	\$152
Subtotal:		\$50	-	\$33	\$119	\$152
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$265	-	\$172	-	\$172
Federal Income Tax on harvest revenue @	35.0%	-	\$1,327	\$1,327	-	\$1,327
Subtotal:		\$265	\$1,327	\$1,499	-	\$1,499
Totals:		\$316	\$1,327	\$1,532	\$119	\$1,651
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.2%	43.6%

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

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

Out-of-Pock	cet Expenses:		•	•				
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expense	es:							
Adminstration	/management.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs	s.):	\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8 00%			<u> </u>		

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

Stand	Harvest	Stumpage	Harvest	State and Federal T	ax Payments:			
Age	<u>Volume</u>	Price	Revenue Arkansas State Income Tax@ 7%		Fed. Income Tax @ 35%	Net Income <u>After Tax</u>	Accrued Interest on Net	Total <u>Income</u>
	(Cords)	\$19	\$0	\$0	- \$0	\$0 \$0	- \$0	- \$0
34	11.16	\$268	\$2,986	(\$209)	**	\$2,777	-	-
	(MBF Doyle)				(\$1,045) <sup>1</sup>	\$1,732	\$0	\$1,732
Total:		-	\$2,986	(\$209)	(\$1,045)	\$1,732	\$0	\$1,732

#### SOUTHWEST PINELOWSITE

Step 3 - Estimated Timberland Value per Acre

1. Total Income including	accrued interest on net thinning income to final harvest:	\$1,732				
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	\$0				
3. Net income before pro	perty tax:	\$1,732				
4. Present value of net in	come before property tax:	\$122				
5. Annual ad valorem pro	pperty taxes:					
Property tax rate:	50 mills @ 20% assessment ratio	1.00%				
Annual property tax pa	Annual property tax payment:					
Annual property tax pa	syment adjusted for fed. inc. tax deduction:	(\$0.73)				
Total property tax payr	ments per harvest cycle:	(\$25)				
Accrued interest on ou	ıt-of-pocket tax payments per harvest cycle:	\$105				
6. Land value after prope	erty tax (adj. for income tax deduction):	\$113				

Step 4 - Tax Burden on Low Site Pine Forest Land

		Total Tax I	Payments:	Out-of-Pocket Expenses		_
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$38	-	\$25	\$105	\$130
Subtotal:		\$38	-	\$25	\$105	\$130
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$209	-	\$136	-	\$136
Federal Income Tax on harvest revenue @	35.0%	-	\$1,045	\$1,045	-	\$1,045
Subtotal:		\$209	\$1,045	\$1,181	-	\$1,181
Totals:		\$247	\$1,045	\$1,206	\$105	\$1,311
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.5%	43.9%

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

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

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<u>Deductible</u>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
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 Expense	es:							
Adminstration/	management.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs	5.):	\$0	"	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
•	**Interest rate	used in computations is:	8 UU%	·	•			

<sup>\*\*</sup>Interest rate used in computations is:

8.00%

	Stand	Harvest	Stu	mpage	Harvest	State and Federal	<u>Tax Payments:</u>			
	<u>Age</u>	<u>Volume</u>	<u> </u>	Price_	Revenue	Arkansas State	Fed. Income	Net Income	Accrued	Total
						Income Tax@ 7%	<u>Tax @ 35%</u>	After Tax	Interest on Net	Income
	40	3.42	\$	40	\$136	(\$10)	-	\$126	-	-
		(Cords)					(\$48)	\$79	\$0	\$79
	40	9.78	\$	387	\$3,784	(\$265)	-	\$3,519	-	-
		(MBF Doyle)					(\$1,325)	\$2,195	\$0	\$2,195
Total:			-		\$3,920	(\$274)	(\$1,372)	\$2,274	\$0	\$2,274

#### SOUTHWEST HARDWOOD

Step 3 - Estimated Timberland Value per Acre

1. Total Income including	\$2,274	
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before pro	perty tax:	\$2,274
4. Present value of net in	\$97	
5. Annual ad valorem pro	pperty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pa	ayment:	(\$0.89)
Annual property tax pa	(\$0.58)	
Total property tax payr	(\$23)	
Accrued interest on ou	\$148	
6. Land value after prope	erty tax (adj. for income tax deduction):	\$89

Step 4 - Tax Burden on HARDWOOD Site Forest Land

		Total Tax Payments:		Out-of-P	Out-of-Pocket Expenses		
		<u>State</u>	<u>Federal</u>	<u>Taxes</u>	Accrued Interest	<u>Total</u>	
Cost-increasing:							
Property taxes on land:		\$36	-	\$23	\$148	\$171	
Subtotal:		\$36	-	\$23	\$148	\$171	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$274	-	\$178	-	\$178	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,372	\$1,372	-	\$1,372	
Subtotal:		\$274	\$1,372	\$1,550	-	\$1,550	
Totals:		\$310	\$1,372	\$1,574	\$148	\$1,721	
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%	

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

SW Region:	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

# **SOUTHWEST REGION TIMBER:**

Cap Rate= <u>8.00%</u>

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$90	\$95	6%
2	\$105	\$110	5%
3	\$155	\$155	0%
4	\$110	\$115	5%
5	\$85	\$85	0%
6	\$155	\$155	0%
7	\$100	\$105	5%
8	\$85	\$90	6%
9	\$125	\$125	0%
10	\$85	\$90	6%
11	\$120	\$120	0%
12	\$130	\$135	4%
13	\$145	\$145	0%
14	\$150	\$150	0%
15	\$140	\$140	0%
16	\$135	\$135	0%
17	\$90	\$90	0%
18	\$75	\$75	0%
			2%

#### CROP AND PASTURE RATES

Crop	Rental Rate Multiplier	Pasture Pasture Cap Ra 8.00%	ate Multipl	lier			Capitalization Rate		
	25.00%  8.25%  Crop Cap Rate Multiplier	Delta States 2008 2009**	LA 27 na	MS 18.5 na	Average 22.75 19	Reported 21.5 19	Safe Rate 10 Year Average of the 30 Year T-Bond	<b>Crop</b> 2.75%	<b>Pasture</b> 2.75%
soybean prices							Industry Risk Rate  Management Rate	3.50% 2.00%	3.50% 1.00%
2014 10.6 2015 9.46 2016 9.83 2017 9.77 2018 8.81 2019 8.87 2020 10.5 2021 12.9 2022 14.4 \$10.82 10 yr	Soybean average price multiplier \$10.82	STATE AVERAGE A 7.7 DELTA 5.3 OUACHITA 6 OZARK 6.8 SOUTHWEST 6.5 AVERAGE  AVG AUM REN VALUE PER ACRE \$2.91		PASTURE I 18 18 18 20 18 18 19 19 20.5	2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 10 yr avera		Capitalization Rate  * Arkansas Code 26-26 developed under subdiv	8.25% 8.25% 8-407 (C) However vision (f) (3) (B) of	7.25% 8.00%  * the capitalization rate this section shall not be an twelve percent (12%).

# **Timber Mart-South Stumpage Price Data**

	Doyle <b>Pine</b>		Doyle <b>O</b> a	ak	Doyle <b>Mixed</b> <b>Hardwood</b>		Average Hardwood		Standard Cord Pine Pulpwood		Standard Cord Hardwood Pulpwood	
YEAR	Sawtir	nber	Sawtimber									
-	Reg. 1	Reg. 2	Reg. 1	Reg. 2	Reg. 1	Reg. 2	Reg. 1	Reg. 2	Reg. 1	Reg. 2	Reg. 1	Reg. 2
2013	\$251.42	\$214.18	\$386.49	\$299.78	\$258.83	\$230.91	\$322.66	\$265.34	\$24.90	\$19.08	\$41.56	\$16.33
2014	\$259.83	\$234.61	\$486.33	\$359.54	\$299.60	\$231.61	\$392.96	\$295.58	\$23.83	\$19.51	\$55.27	\$28.51
2015	\$268.55	\$244.40	\$486.94	\$388.33	\$301.00	\$270.99	\$393.97	\$329.66	\$21.52	\$19.59	\$51.65	\$35.15
2016	\$250.78	\$244.83	\$475.30	\$426.13	\$344.31	\$343.96	\$409.81	\$385.04	\$19.78	\$17.18	\$39.79	\$30.39
2017	\$243.98	\$227.48	\$463.31	\$401.63	\$282.28	\$335.91	\$372.79	\$368.77	\$17.07	\$16.80	\$36.16	\$24.97
2018	\$249.83	\$231.42	\$474.86	\$432.69	\$302.23	\$354.03	\$388.54	\$393.36	\$18.68	\$17.58	\$40.17	\$30.10
2019	\$272.06	\$246.21	\$498.23	\$474.69	\$349.30	\$349.48	\$423.76	\$412.08	\$19.94	\$18.63	\$49.24	\$34.22
2020	\$263.87	\$237.59	\$387.67	\$389.83	\$308.79	\$305.99	\$348.23	\$347.91	\$15.81	\$14.98	\$22.62	\$23.06
2021	\$314.84	\$260.15	\$474.95	\$431.90	\$328.65	\$341.78	\$401.80	\$386.84	\$14.61	\$13.64	\$26.22	\$19.66
2022	\$301.11	\$262.60	\$468.56	\$464.10	\$363.04	\$387.71	\$415.80	\$425.91	\$15.14	\$14.50	\$34.68	\$26.94
10 YEAR AVG	\$267.63	\$240.35	\$460.26	\$406.86	\$313.80	\$315.24	\$387.03	\$361.05	\$19.13	\$17.15	\$39.74	\$26.93

## **FORESTRY RELATED COSTS**

						10 Year
Forestry Costs:	2014	2016	2018	2020	2022	Average
Planting by Hand	0.1122	0.1	0.15	0.13	0.12	
Planting by Machine	0.14	0.14	0.19	0.17	0.17	
Avg	0.1261	0.12	0.17	0.15	0.145	
Cost for 604 tree/ac	\$76.16	\$72.48	\$102.68	\$90.60	\$87.58	
Site Prep	\$66.09	\$97.28	\$127.42	\$110.23	\$119.25	
Total Establishment	\$142.25	\$169.76	\$230.10	\$200.83	\$206.83	\$189.96
Spraying	\$29.89	\$69.53	\$77.09	\$87.08	\$89.64	\$70.65
PCT	*	\$159.44	\$148.40	\$144.05	\$139.22	\$147.78
Fertilization	\$79.49	\$70.41	\$94.79	\$87.83	\$90.97	\$84.70
						\$493

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

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

## **Timber Growth/Yield Information**

## Pine Yields (1/3)

## 

ſ	Marg. Site			Med Site			High Site			
	65	70	75	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):

		Cubic Ft.	Bd. Ft. per	Annual
Species	Site Index	Growth	Cub. Ft.	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)