From:	Rob McGee
To:	Freeburn, Vicki
Cc:	Bear Chaney; Faye Tate
Subject:	2016 Agricultural Valuation Report from ACD
Date:	Thursday, October 15, 2015 12:48:32 PM
Attachments:	image001.png
	2016 Agricultural Report.pdf

Vicki,

Here is the 2016 Cropland, Pastureland and Timberland Valuation for Property Tax Purposes report. Our agency is required to submit the report per A.C.A. 26-26-407 (4), which requires that ACD report by October 15th of each year to Legislative Council any changes to any part of the formula used to determine the value of land or the capitalization rate.

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

If you have any questions please let me know.

Robert McGee Division Administrator Arkansas Assessment Coordination Department 501-324-9114 <u>Robert.McGee@acd.state.ar.us</u>





2016 Cropland, Pastureland and Timberland Valuation for Property Tax Purposes



Arkansas Assessment Coordination Department

October 15, 2015

# **STATE OF ARKANSAS**



# ASSESSMENT COORDINATION DEPARTMENT

1614 WEST THIRD LITTLE ROCK, ARKANSAS 72201-1815 PHONE (501) 324-9240 FAX (501) 324-9242

Bear Chaney Director

October 15, 2015

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

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

Contained within this report are the guidelines used by ACD in 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 2015.

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

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

Sincerely,

Robert McGee Division Administrator Arkansas Assessment Coordination Department 501-324-9114 <u>Robert.McGee@acd.state.ar.us</u>

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Guidelines For The Mass Appraisal Of Cropland,

Timberland, and Pastureland In The State Of Arkansas

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

Revised 2015

# Overview

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

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

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



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

# Statute Highlights

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

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

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

# Statute Highlights cont.

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

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

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

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

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

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

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

# Soils

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

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

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

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

ACD#	LAND	CAPABILITY CLASSIFICATION
1	I-	Soils have few limitations that restrict use.
2	IIw -	Soils have moderate water limitations that reduce the choice of plants or require moderate conservation practices.
3	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 INDIC	ATE LIM	ITATIONS (PROBLEMS) ASSOCIATED WITH THOSE SOILS.

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

# **Determining Use**

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



Identifying the property

**Determining Use** 





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

An example of a 40 acre parcel.

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

# Valuation

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

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 2015 values are based on data that was captured through the end of 2013, compiled and then published in the third quarter of 2014, applied to our formulas in 2014 and released for use in the reappraisal cycles ending in 2015.

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 \$9.71. This amount is multiplied by the NRCS average bushel per acre of soybeans for each soil type. To adjust for operating costs a 25/75 rental rate split is assumed with the 25 percent applied as net income. It is then divided by the capitalization rate.

	AVERAGE SOYBEAN BUSHEL PER ACRE	10 YEAR AV- ERAGE OF PRICES RE- CEIVED BY FARMERS	SUM	75/25 SPLIT	APPLIED CAPITALI- ZATION RATE	ROUNDED TO THE NEAREST \$5
					9.56%	
ACD 1	39	\$10.20	\$397.80	\$99.45	\$1,040.27	\$1,040
ACD 2	35	\$10.20	\$357.00	\$89.25	\$933.58	\$935
ACD 3	18	\$10.20	\$183.60	\$45.90	\$480.13	\$480

# 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 \$17.85. This leads to a \$2.77 per AUM value statewide which is the equivalent of the per bushel price for soybeans. The average AUM for each soil class is multiplied by price per AUM and then divided by the capitalization rate.

	AUM	AVG \$ PER AUM	TOTAL	APPLIED CAPITAL- IZATION RATE	ROUNDED TO NEAREST \$5
				8.56%	
ACD 1	9.9	\$2.80	\$27.72	\$323.83	\$325
ACD 2	8.4	\$2.80	\$23.52	\$274.77	\$275
ACD 3	5.2	\$2.80	\$14.56	\$170.09	\$170

# 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:

State average	Х	Harvest vol-	=	Income from	- Expenses from /	Capitalization	=	Value
prices on board		umes by soil		thinning and	planting thin-	rate		
and pulp		type and spe-		final harvests	ning etc.			
		cies and board and or pulp						

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

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

# FAQ's

# **Fire Protection Tax**

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

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

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

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

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

DELTA

CROP

••.									
	AVERAGE SOYBEAN BUSHEL PER ACRE	10 YEAR AVERAGE OF PRICES RECEIVED BY FARMERS	SUM	75/25 SPLIT	APPLIED CAPITALI- ZATION RATE	ROUNDED TO THE NEAREST \$5	OLD RATE ROUNDED TO THE NEAREST \$5	DIFF	% DIFF
	20	¢40.00	¢007.00	ФОО 4 <i>Г</i>	9.56%	¢4.040	¢075	¢cE	70/
ACD 1	39	\$10.20	\$397.80	\$99.45	\$1,040.27	\$1,040	\$975	\$65	7%
ACD 2	35	\$10.20	\$357.00	\$89.25	\$933.58	\$935	\$875	\$60	7%
ACD 3	18	\$10.20	\$183.60	\$45.90	\$480.13	\$480	\$450	\$30	7%
ACD 4	32	\$10.20	\$326.40	\$81.60	\$853.56	\$855	\$800	\$55	7%
ACD 5	30	\$10.20	\$306.00	\$76.50	\$800.21	\$800	\$750	\$50	7%
ACD 6	14	\$10.20	\$142.80	\$35.70	\$373.43	\$375	\$350	\$25	7%
ACD 7	29	\$10.20	\$295.80	\$73.95	\$773.54	\$775	\$725	\$50	7%
ACD 8	29	\$10.20	\$295.80	\$73.95	\$773.54	\$775	\$725	\$50	7%
ACD 9	14	\$10.20	\$142.80	\$35.70	\$373.43	\$375	\$350	\$25	7%
ACD 10	29	\$10.20	\$295.80	\$73.95	\$773.54	\$775	\$725	\$50	7%
ACD 11	14	\$10.20	\$142.80	\$35.70	\$373.43	\$375	\$350	\$25	7%
ACD 12	31	\$10.20	\$316.20	\$79.05	\$826.88	\$825	\$775	\$50	6%
ACD 13	24	\$10.20	\$244.80	\$61.20	\$640.17	\$640	\$600	\$40	7%
ACD 14	22	\$10.20	\$224.40	\$56.10	\$586.82	\$585	\$550	\$35	6%
ACD 15						\$285	\$270	\$15	6%
ACD 16						\$235	\$220	\$15	7%
ACD 17						\$170	\$160	\$10	6%
ACD 18						\$115	\$110	\$5	5%

### SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - 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
				8.56%				
ACD 1	9.9	\$2.80	\$27.72	\$323.83	\$325	\$315	\$10	3%
ACD 2	8.4	\$2.80	\$23.52	\$274.77	\$275	\$265	\$10	4%
ACD 3	5.2	\$2.80	\$14.56	\$170.09	\$170	\$165	\$5	3%
ACD 4	7.4	\$2.80	\$20.72	\$242.06	\$240	\$235	\$5	2%
ACD 5	7.1	\$2.80	\$19.88	\$232.24	\$230	\$225	\$5	2%
ACD 6	4.1	\$2.80	\$11.48	\$134.11	\$135	\$130	\$5	4%
ACD 7	6.7	\$2.80	\$18.76	\$219.16	\$220	\$215	\$5	2%
ACD 8	5.5	\$2.80	\$15.40	\$179.91	\$180	\$175	\$5	3%
ACD 9	4	\$2.80	\$11.20	\$130.84	\$130	\$125	\$5	4%
ACD 10	5.5	\$2.80	\$15.40	\$179.91	\$180	\$175	\$5	3%
ACD 11	3.5	\$2.80	\$9.80	\$114.49	\$115	\$110	\$5	5%
ACD 12	8.8	\$2.80	\$24.64	\$287.85	\$290	\$280	\$10	4%
ACD 13	7.7	\$2.80	\$21.56	\$251.87	\$250	\$245	\$5	2%
ACD 14	6.2	\$2.80	\$17.36	\$202.80	\$205	\$195	\$10	5%
ACD 15	4.7	\$2.80	\$13.16	\$153.74	\$155	\$150	\$5	3%
ACD 16	4.7	\$2.80	\$13.16	\$153.74	\$155	\$150	\$5	3%
ACD 17	4.7	\$2.80	\$13.16	\$153.74	\$155	\$150	\$5	3%
ACD 18					\$75	\$75	\$0	0%

### SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

#### DELTA PINEHIGHSITE

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

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

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

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

St	tand	Harvest	Stu	mpage	Harvest	State and Federal 1	ax Payments:				
/	<u>Age</u>	Volume	F	Price	Revenue	Arkansas State	Fed. Income		Net Income	Accrued	Total
						Income Tax@ 7%	<u>Tax @ 35%</u>		After Tax	Interest on Net	Income
1	6	9.21	\$	23	\$214	(\$15)	-		\$199	-	-
		(Cords)					(\$75)	1	\$124	\$256	\$380
2	23	3.78	\$	301	\$1,138	(\$80)	-		\$1,059	-	-
		(MBF Doyle)					(\$398)	1	\$660	\$496	\$1,156
3	30	16.45	\$	301	\$4,950	(\$346)	-		\$4,603	-	-
		(MBF Doyle)					(\$1,593)	1	\$3,010	\$0	\$3,010
:			-		\$6,302	(\$441)	(\$2,066)		\$3,134	\$751	\$4,546

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

(\$2,649) \$1.897
\$1.897
\$189
1.00%
(\$1.75)
(\$1.14)
(\$34)
\$108

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

		Total Tax	Payments:	Out-of-P	ocket Expenses		
		State	Federal	Taxes	Accrued Interest	<u>Total</u>	
Cost-increasing:							
Property taxes on land:		\$53	-	\$34	\$108	\$143	
Subtotal:		\$53	-	\$34	\$108	\$143	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$441	-	\$287	-	\$287	
Federal Income Tax on harvest revenue @	35.0%	-	\$2,066	\$2,066	-	\$2,066	
Subtotal:		\$441	\$2,066	\$2,353	-	\$2,353	
Totals:		\$494	\$2,066	\$2,387	\$108	\$2,495	
Tax burden as percent of gross revenues:		7.8%	32.8%	37.9%	1.7%	39.6%	

#### DELTA PINEMEDSITE

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

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<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
Subtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
Annual Expense	es:							
Adminstration/	management .:	\$8	Yes	\$3	\$5	\$31	\$57	\$29
Subtotal (32 yrs	.):	\$256	"	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
	**Interest rate	e used in computations is:	8.00%					

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

#### 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 Income Tax@ 7%	Fed. Income <u>Tax @ 35%</u>		Net Income <u>After Tax</u>	Accrued Interest on Net	Total <u>Income</u>
18	8.03	\$23.19	\$186	(\$13)	-		\$173	-	-
	(Cords)				(\$65)	1	\$108	\$223	\$331
32	13.59	\$300.93	\$4,090	(\$286)	-		\$3,804	-	-
	(MBF Doyle)				(\$1,431)	1	\$2,372	\$0	\$2,372
tal:		-	\$4,276	(\$299)	(\$1,497)		\$2,480	\$223	\$2,703

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

1. Total Income including	accrued interest on net thinning income to final harvest:	\$2,703				
2. Out-of-pocket expense	s (silvicultural activities and taxes) and accrued interest:	(\$358)				
3. Net income before prop	perty tax:	\$2,345				
4. Present value of net inc	come before property tax:	\$196				
5. Annual ad valorem pro	perty taxes:					
Property tax rate:	50 mills @ 20% assessment ratio	1.00%				
Annual property tax page	Annual property tax payment:					
Annual property tax pay	yment adjusted for fed. inc. tax deduction:	(\$1.18)				
Total property tax payn	nents per harvest cycle:	(\$38)				
Accrued interest on out	Accrued interest on out-of-pocket tax payments per harvest cycle:					
		\$				
6. Land value after proper	. Land value after property tax (adj. for income tax deduction):					

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

		Total Tax	Payments:	Out-of-P	ocket Expenses	
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		\$58	-	\$38	\$138	\$176
Subtotal:		\$58	-	\$38	\$138	\$176
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$299	-	\$195	-	\$195
Federal Income Tax on harvest revenue @	35.0%	-	\$1,497	\$1,497	-	\$1,497
Subtotal:		\$299	\$1,497	\$1,691	-	\$1,691
Totals:		\$357	\$1,497	\$1,729	\$138	\$1,867
Tax burden as percent of gross revenues:		8.4%	35.0%	40.4%	3.2%	43.7%

#### DELTA PINELOWSITE

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

Out-of-Pocke	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<b>Benefit</b>	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	s:							
Adminstration/r	management.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs.	.):	\$0	II	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8.00%					

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

# 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>	Price	Revenue	Arkansas State Income Tax@ 7%	Fed. Income <u>Tax @ 35%</u>	Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
	(Cords)	\$23	\$0	\$0	- \$0	\$0 \$0	- \$0	- \$0
34	11.16	\$301	\$3,358	(\$235)		\$3,123	-	-
	(MBF Doyle)				(\$1,175) <sup>1</sup>	\$1,948	\$0	\$1,948
al:		-	\$3,358	(\$235)	(\$1,175)	\$1,948	\$0	\$1,948

1. Total Income including	accrued interest on net thinning income to final harvest:	\$1,948				
2. Out-of-pocket expense	s (silvicultural activities and taxes) and accrued interest:	\$0				
3. Net income before prop	perty tax:	\$1,948				
4. Present value of net ind	come before property tax:	\$137				
5. Annual ad valorem pro	perty taxes:					
Property tax rate:	50 mills @ 20% assessment ratio	1.00%				
Annual property tax pay	yment:	(\$1.27)				
Annual property tax pay	yment adjusted for fed. inc. tax deduction:	(\$0.83)				
Total property tax payn	nents per harvest cycle:	(\$28)				
Accrued interest on out	Accrued interest on out-of-pocket tax payments per harvest cycle:					
Acclued Interest on our	-or-pocket tax payments per harvest cycle.	\$				
<ol><li>Land value after proper</li></ol>	. Land value after property tax (adj. for income tax deduction):					

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

		Total Tax	Payments:	Out-of-P	ocket Expenses	
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		\$43	-	\$28	\$118	\$146
Subtotal:		\$43	-	\$28	\$118	\$146
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$235	-	\$153	-	\$153
Federal Income Tax on harvest revenue @	35.0%	-	\$1,175	\$1,175	-	\$1,175
Subtotal:		\$235	\$1,175	\$1,328	-	\$1,328
Totals:		\$278	\$1,175	\$1,356	\$118	\$1,474
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.5%	43.9%

#### DELTA HARDWOOD

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

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<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	.):	\$0	II	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8.00%					

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

\*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 1	ax Payments:				
Age	<u>Volume</u>	F	Price	Revenue	Arkansas State Income Tax@ 7%	Fed. Income <u>Tax @ 35%</u>		Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
40	3.42 (Cords)	\$	29	\$100	(\$7)	- (\$35)		\$93 \$58	- \$0	- \$58
40	9.78	\$	265	\$2,592	(\$181)	-		\$2,410	-	-
	(MBF Doyle)					(\$907)	1	\$1,503	\$0	\$1,503
al:		-		\$2,692	(\$188)	(\$942)		\$1,561	\$0	\$1,561

1. Total Income including	accrued interest on net thinning income to final harvest:	\$1,561				
2. Out-of-pocket expenses	s (silvicultural activities and taxes) and accrued interest:	\$0				
3. Net income before prop	perty tax:	\$1,561				
4. Present value of net inc	Present value of net income before property tax:					
5. Annual ad valorem prop	perty taxes:					
Property tax rate:	50 mills @ 20% assessment ratio	1.00%				
Annual property tax pay	Annual property tax payment:					
Annual property tax pay	yment adjusted for fed. inc. tax deduction:	(\$0.40)				
Total property tax paym	nents per harvest cycle:	(\$16)				
Accrued interest on out	t-of-pocket tax payments per harvest cycle:	\$101				
		Ψισ				
6. Land value after proper	. Land value after property tax (adj. for income tax deduction):					

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

		Total Tax	Payments:	Out-of-P	ocket Expenses	
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		\$25	-	\$16	\$101	\$117
Subtotal:		\$25	-	\$16	\$101	\$117
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$188	-	\$122	-	\$122
Federal Income Tax on harvest revenue @	35.0%	-	\$942	\$942	-	\$942
Subtotal:		\$188	\$942	\$1,065	-	\$1,065
Totals:		\$213	\$942	\$1,081	\$101	\$1,182
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

# **DELTA REGION TIMBER:**

Cap Rate=	<u>8.00%</u>
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ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$60	\$65	8%
2	\$95	\$95	0%
3	\$90	\$90	0%
4	\$100	\$100	0%
5	\$60	\$60	0%
6	\$115	\$110	-4%
7	\$75	\$75	0%
8	\$85	\$85	0%
9	\$130	\$125	-4%
10	\$100	\$100	0%
11	\$140	\$135	-4%
12	\$140	\$135	-4%
13	\$170	\$165	-3%
14	\$170	\$165	-3%
15	\$170	\$160	-6%
16	\$185	\$170	-8%
17	\$100	\$100	0%
18	\$65	\$65	0%
			-1%

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

Delta 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

# OUACHITA

CROP

	AVERAGE BUSHEL PER ACRE	10 YEAR AVG 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
		• • • • • •	• • • • • •	• • • •	9.56%	• • • • •	• -	•	
ACD 1	39	\$10.20	\$397.80	\$99.45	\$1,040.27	\$1,040	\$975	\$65	7%
ACD 2	31	\$10.20	\$316.20	\$79.05	\$826.88	\$825	\$775	\$50	6%
ACD 3	18	\$10.20	\$183.60	\$45.90	\$480.13	\$480	\$450	\$30	7%
ACD 4	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 5	18	\$10.20	\$183.60	\$45.90	\$480.13	\$480	\$450	\$30	7%
ACD 6	18	\$10.20	\$183.60	\$45.90	\$480.13	\$480	\$450	\$30	7%
ACD 7	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 8	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 9	18	\$10.20	\$183.60	\$45.90	\$480.13	\$480	\$450	\$30	7%
ACD 10	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 11	15	\$10.20	\$153.00	\$38.25	\$400.10	\$400	\$375	\$25	7%
ACD 12	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 13	20	\$10.20	\$204.00	\$51.00	\$533.47	\$535	\$500	\$35	7%
ACD 14	20	\$10.20	\$204.00	\$51.00	\$533.47	\$535	\$500	\$35	7%
ACD 15						\$300	\$280	\$20	7%
ACD 16						\$240	\$225	\$15	7%
ACD 17						\$185	\$175	\$10	6%
ACD 18						\$115	\$110	\$5	5%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

# OUACHITA

# PASTURE

						OLD RATE		
				CAPITAL-		ROUNDED TO		
		AVG \$ PER		IZATION	ROUNDED TO	THE NEAREST		
	AUM	AUM	TOTAL	RATE	NEAREST \$5	\$5	DIFF	% DIFF
				8.56%				
ACD 1	8.4	\$2.80	\$23.52	\$274.77	\$275	\$265	\$10	4%
ACD 2	7.7	\$2.80	\$21.56	\$251.87	\$250	\$245	\$5	2%
ACD 3	5.1	\$2.80	\$14.28	\$166.82	\$165	\$160	\$5	3%
ACD 4	6.3	\$2.80	\$17.64	\$206.07	\$205	\$200	\$5	3%
ACD 5	5.1	\$2.80	\$14.28	\$166.82	\$165	\$160	\$5	3%
ACD 6	4.2	\$2.80	\$11.76	\$137.38	\$135	\$135	\$0	0%
ACD 7	6.7	\$2.80	\$18.76	\$219.16	\$220	\$215	\$5	2%
ACD 8	6.1	\$2.80	\$17.08	\$199.53	\$200	\$195	\$5	3%
ACD 9	3.9	\$2.80	\$10.92	\$127.57	\$130	\$125	\$5	4%
ACD 10	6.7	\$2.80	\$18.76	\$219.16	\$220	\$215	\$5	2%
ACD 11	4.2	\$2.80	\$11.76	\$137.38	\$135	\$135	\$0	0%
ACD 12	6.9	\$2.80	\$19.32	\$225.70	\$225	\$220	\$5	2%
ACD 13	6.4	\$2.80	\$17.92	\$209.35	\$210	\$205	\$5	2%
ACD 14	5.1	\$2.80	\$14.28	\$166.82	\$165	\$160	\$5	3%
ACD 15	4.2	\$2.80	\$11.76	\$137.38	\$135	\$135	\$0	0%
ACD 16	4.2	\$2.80	\$11.76	\$137.38	\$135	\$135	\$0	0%
ACD 17	4.2	\$2.80	\$11.76	\$137.38	\$135	\$135	\$0	0%
ACD 18					\$75	\$75	\$0	0%

# SOURCES:

# NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

#### OUACHITA PINEHIGHSITE

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

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

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

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

Stan	d Harvest	Stu	mpage	Harvest	State and Federal	Tax Payments:				
<u>Age</u>	<u>Volume</u>	<u>F</u>	Price	<u>Revenue</u>	Arkansas State Income Tax@ 7%	Fed. Income <u>Tax @ 35%</u>		Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
16	9.21 (Cords)	\$	26	\$235	(\$16)	- (\$82)	1	\$219 \$136	- \$282	- \$418
23	3.78 (MBF Doyle)		331	\$1,254	(\$88)	(\$439)	1	\$1,166 \$727	- \$546	- \$1,273
30	16.45 (MBF Doyle)	\$	331	\$5,451	(\$382)	<b>(</b> \$1,769)	1	\$5,070 \$3,301	- \$0	- \$3,301
Total:		-		\$6,940	(\$486)	(\$2,290)		\$3,438	\$827	\$4,992

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

1. Total Income including	accrued interest on net thinning income to final harvest:	\$4,992
2. Out-of-pocket expense	s (silvicultural activities and taxes) and accrued interest:	(\$2,649)
3. Net income before prop	perty tax:	\$2,344
4. Present value of net inc	come before property tax:	\$234
5. Annual ad valorem pro	perty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax page	yment:	(\$2.16)
Annual property tax page	yment adjusted for fed. inc. tax deduction:	(\$1.41)
Total property tax payn	nents per harvest cycle:	(\$42)
Accrued interest on out	t-of-pocket tax payments per harvest cycle:	\$134
6. Land value after proper	rty tax (adj. for income tax deduction):	\$216

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

		Total Tax	Payments:	Out-of-P	ocket Expenses	
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		\$65	-	\$42	\$134	\$176
Subtotal:		\$65	-	\$42	\$134	\$176
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$486	-	\$316	-	\$316
Federal Income Tax on harvest revenue @	35.0%	-	\$2,290	\$2,290	-	\$2,290
Subtotal:		\$486	\$2,290	\$2,605	-	\$2,605
Totals:		\$551	\$2,290	\$2,648	\$134	\$2,782
Tax burden as percent of gross revenues:		7.9%	33.0%	38.1%	1.9%	40.1%

#### OUACHITA PINEMEDSITE

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

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<b>Benefit</b>	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	II	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
	**Interest rate	used in computations is:	8.0%					

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

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

Stand	Harvest	Stumpage	Harvest	State and Federal	Tax Payments:				
<u>Age</u>	Volume	<u>Price</u>	Revenue	Arkansas State Income Tax@ 7%	Fed. Income <u>Tax @ 35%</u>		Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
18	8.03	\$25.53	\$205	(\$14)	-		\$191	-	-
	(Cords)				(\$72)	1	\$119	\$245	\$364
32	13.59	\$331.44	\$4,504	(\$315)	-		\$4,189	-	-
	(MBF Doyle)				(\$1,577)	1	\$2,613	\$0	\$2,613
otal:		-	\$4,709	(\$330)	(\$1,648)		\$2,731	\$245	\$2,977

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

<ol> <li>Total Income including a</li> </ol>	accrued interest on net thinning income to final harvest:	\$2,977
2. Out-of-pocket expenses	s (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before prop	erty tax:	\$2,619
4. Present value of net inc	come before property tax:	\$219
5. Annual ad valorem prop	perty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pay	/ment:	(\$2.03)
Annual property tax pay	ment adjusted for fed. inc. tax deduction:	(\$1.32)
Total property tax paym	ients per harvest cycle:	(\$42)
Accrued interest on out-	\$155	

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

		Total Tax	Payments:	Out-of-P	Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total	
Cost-increasing:							
Property taxes on land:		\$65	-	\$42	\$155	\$197	
Subtotal:		\$65	-	\$42	\$155	\$197	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$330	-	\$214	-	\$214	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,648	\$1,648	-	\$1,648	
Subtotal:		\$330	\$1,648	\$1,863	-	\$1,863	
Totals:		\$395	\$1,648	\$1,905	\$155	\$2,059	
Tax burden as percent of gross revenues:		8.4%	35.0%	40.4%	3.3%	43.7%	

#### OUACHITA PINELOWSITE

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

Out-of-Pock	et Expenses:								
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total	
			<b>Deductible</b>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest	
0	Prep./Plant	\$O	No	\$0	\$0	\$0	\$0	\$0	
3	Spray	\$O	Yes	\$0	\$0	\$0	\$0	\$0	
8	PCT	\$O	Yes	\$0	\$0	\$0	\$0	\$0	
19	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0	
24	24 Fert. \$0		Yes	\$0	\$0	\$0	\$0	\$0	
ubtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0	
nnual Expense	es:								
Adminstration/	management .:	<b>\$</b> 0	Yes	\$0	\$0	\$0	\$0	\$0	
ubtotal (34 yrs			II	\$0	\$0	\$0 \$0		\$0	
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0	
	**Interest rate	used in computations is:	8.0%						

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

\*Interest rate used in computations is:

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

Stand	Harvest	Stumpage	Harvest	State and Federal	Tax Payments:			
Age	Volume	Price	Revenue	Arkansas State	Fed. Income	Net Income	Accrued	Total
				Income Tax@ 7%	<u>Tax @ 35%</u>	<u>After Tax</u>	Interest on Net	Income
		\$26	\$0	\$0	-	\$0	-	-
	(Cords)				\$0	\$0	\$0	\$0
34	11.16	\$331	\$3,698	(\$259)		\$3,439	-	-
	(MBF Doyle)				(\$1,294) <sup>1</sup>	\$2,145	\$0	\$2,145
Total:		-	\$3,698	(\$259)	(\$1,294)	\$2,145	\$0	\$2,145

	crued interest on net thinning income to final harvest:	\$2,145
2. Out-of-pocket expenses (s	silvicultural activities and taxes) and accrued interest:	\$0
3. Net income before propert	ty tax:	\$2,145
4. Present value of net incon	ne before property tax:	\$151
5. Annual ad valorem proper	rty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payme	ent:	(\$1.40)
Annual property tax payme	ent adjusted for fed. inc. tax deduction:	(\$0.91)
Total property tax paymen	nts per harvest cycle:	(\$31)
Accrued interest on out-of	f-pocket tax payments per harvest cycle:	\$130

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

		Total Tax	Payments:	Out-of-P	Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	<u>Total</u>	
Cost-increasing:							
Property taxes on land:		\$48	-	\$31	\$130	\$161	
Subtotal:		\$48	-	\$31	\$130	\$161	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$259	-	\$168	-	\$168	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,294	\$1,294	-	\$1,294	
Subtotal:		\$259	\$1,294	\$1,463	-	\$1,463	
Totals:		\$306	\$1,294	\$1,494	\$130	\$1,624	
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)

Out-of-Pock	et Expenses:									
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total		
-	-		<b>Deductible</b>	<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		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	.):	\$0	"	\$0	\$0	\$0	\$0	\$0		
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0		
	**Interest rate	used in computations is:	8.00%							

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

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

	Stand	Harvest	Stu	mpage	Harvest	State and Federal	Tax Payments:				
	Age	<u>Volume</u>	F	<u>Price</u>	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	\$	38	\$130	(\$9)	-		\$121	-	-
		(Cords)					(\$46)		\$76	\$0	\$76
	40	9.78	\$	292	\$2,859	(\$200)	-		\$2,659	-	-
		(MBF Doyle)					(\$1,001)	1	\$1,658	\$0	\$1,658
Total:			-		\$2,989	(\$209)	(\$1,046)		\$1,734	\$0	\$1,734

\$0 \$1,734
¢1 70/
φ1,734
\$74
1.00%
(\$0.68)
(\$0.44)
(\$18)
\$113

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

		Total Tax	Payments:	Out-of-P	Out-of-Pocket Expenses	
		State	Federal	Taxes	Accrued Interest	<u>Total</u>
Cost-increasing:						
Property taxes on land:		\$27	-	\$18	\$113	\$130
Subtotal:		\$27	-	\$18	\$113	\$130
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$209	-	\$136	-	\$136
Federal Income Tax on harvest revenue @	35.0%	-	\$1,046	\$1,046	-	\$1,046
Subtotal:		\$209	\$1,046	\$1,182	-	\$1,182
Totals:		\$237	\$1,046	\$1,200	\$113	\$1,313
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

# **OUACHITA REGION TIMBER:**

Cap Rate= 8.00%

	Previous	Current	
ACD#	Value/Acre	Value/Acre	Var/Ac
1	\$65	\$70	8%
2	\$190	\$185	-3%
3	\$65	\$70	8%
4	\$130	\$125	-4%
5	\$100	\$100	0%
6	\$130	\$130	0%
7	\$125	\$120	-4%
8	\$100	\$100	0%
9	\$150	\$145	-3%
10	\$100	\$100	0%
11	\$150	\$145	-3%
12	\$185	\$180	-3%
13	\$185	\$180	-3%
14	\$180	\$170	-6%
15	\$160	\$155	-3%
16	\$175	\$165	-6%
17	\$100	\$100	0%
18	\$70	\$70	0%
			-1%

# DCF's Harvest Volume by Region

<b>Ouachita Region</b>	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

OZARK

CROP

	AVERAGE BUSHEL PER ACRE	10 YEAR AVG OF PRICES RECEIVED BY FARMERS	SUM	75/25 SPLIT	CAPITALI- ZATION RATE	ROUNDED TO THE NEAREST \$5		DIFF	% DIFF
					9.56%				
ACD 1	38	\$10.20	\$387.60	\$96.90	\$1,013.60	\$1,015	\$950	\$65	7%
ACD 2	31	\$10.20	\$316.20	\$79.05	\$826.88	\$825	\$775	\$50	6%
ACD 3	23	\$10.20	\$234.60	\$58.65	\$613.49	\$615	\$575	\$40	7%
ACD 4	29	\$10.20	\$295.80	\$73.95	\$773.54	\$775	\$725	\$50	7%
ACD 5	23	\$10.20	\$234.60	\$58.65	\$613.49	\$615	\$575	\$40	7%
ACD 6	15	\$10.20	\$153.00	\$38.25	\$400.10	\$400	\$375	\$25	7%
ACD 7	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 8	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 9	15	\$10.20	\$153.00	\$38.25	\$400.10	\$400	\$375	\$25	7%
ACD 10	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 11	15	\$10.20	\$153.00	\$38.25	\$400.10	\$400	\$375	\$25	7%
ACD 12	28	\$10.20	\$285.60	\$71.40	\$746.86	\$745	\$700	\$45	6%
ACD 13	20	\$10.20	\$204.00	\$51.00	\$533.47	\$535	\$500	\$35	7%
ACD 14	20	\$10.20	\$204.00	\$51.00	\$533.47	\$535	\$500	\$35	7%
ACD 15						\$300	\$280	\$20	7%
ACD 16						\$240	\$225	\$15	7%
ACD 17						\$185	\$175	\$10	6%
ACD 18						\$115	\$110	\$5	5%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

### OZARK

### PASTURE

						OLD RATE		
				CAPITAL-		ROUNDED TO		
		AVG \$ PER	TOTAL	IZATION	ROUNDED TO		DIFE	
	AUM	AUM	TOTAL	RATE	NEAREST \$5	\$5	DIFF	% DIFF
				8.56%				
ACD 1	9.8	\$2.80	\$27.44	\$320.56	\$320	\$310	\$10	3%
ACD 2	8	\$2.80	\$22.40	\$261.68	\$260	\$255	\$5	2%
ACD 3	6.1	\$2.80	\$17.08	\$199.53	\$200	\$195	\$5	3%
ACD 4	6.3	\$2.80	\$17.64	\$206.07	\$205	\$200	\$5	3%
ACD 5	6.6	\$2.80	\$18.48	\$215.89	\$215	\$210	\$5	2%
ACD 6	4.4	\$2.80	\$12.32	\$143.93	\$145	\$140	\$5	4%
ACD 7	6.5	\$2.80	\$18.20	\$212.62	\$215	\$205	\$10	5%
ACD 8	6.6	\$2.80	\$18.48	\$215.89	\$215	\$210	\$5	2%
ACD 9	4.2	\$2.80	\$11.76	\$137.38	\$135	\$135	\$0	0%
ACD 10	6.5	\$2.80	\$18.20	\$212.62	\$215	\$205	\$10	5%
ACD 11	3.1	\$2.80	\$8.68	\$101.40	\$100	\$100	\$0	0%
ACD 12	7.8	\$2.80	\$21.84	\$255.14	\$255	\$245	\$10	4%
ACD 13	6.6	\$2.80	\$18.48	\$215.89	\$215	\$210	\$5	2%
ACD 14	5.2	\$2.80	\$14.56	\$170.09	\$170	\$165	\$5	3%
ACD 15	4.4	\$2.80	\$12.32	\$143.93	\$145	\$140	\$5	4%
ACD 16	3.7	\$2.80	\$10.36	\$121.03	\$120	\$115	\$5	4%
ACD 17	3.7	\$2.80	\$10.36	\$121.03	\$120	\$115	\$5	4%
ACD 18					\$75	\$75	\$0	0%

### SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

#### OZARK PINEHIGHSITE

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

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

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

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

Stand	Harvest	Stumpage	Harvest	State and Federal T	ax Payments:				
Age	Volume	Price	Revenue	Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
16	9.21	\$20.86	\$192	(\$13)	-		\$179	-	-
	(Cords)				(\$67)	1	\$111	\$230	\$342
23	3.78	\$270.42	\$1,023	(\$72)	-		\$951	-	-
	(MBF Doyle)				(\$358)	1	\$593	\$445	\$1,039
30	16.45	\$270.42	\$4,448	(\$311)	-		\$4,137	-	-
	(MBF Doyle)				(\$1,417)	1	\$2,719	\$0	\$2,719
I:		-	\$5,663	(\$396)	(\$1,843)		\$3,424	\$675	\$4,099

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:	\$4,099
2. Out-of-pocket expense	s (silvicultural activities and taxes) and accrued interest:	(\$2,649)
3. Net income before prop	perty tax:	\$1,451
4. Present value of net ind	come before property tax:	\$145
5. Annual ad valorem pro	perty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax page	yment:	(\$1.34)
Annual property tax pa	yment adjusted for fed. inc. tax deduction:	(\$0.87)
Total property tax payn	nents per harvest cycle:	(\$26)
Accrued interest on out	t-of-pocket tax payments per harvest cycle:	\$83
6. Land value after proper	rty tax (adj. for income tax deduction):	\$134

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

		Total Tax	Payments:	Out-of-P	ocket Expenses	
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		\$40	-	\$26	\$83	\$109
Subtotal:		\$40	-	\$26	\$83	\$109
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$396	-	\$258	-	\$258
Federal Income Tax on harvest revenue @	35.0%	-	\$1,843	\$1,843	-	\$1,843
Subtotal:		\$396	\$1,843	\$2,100	-	\$2,100
Totals:		\$437	\$1,843	\$2,126	\$83	\$2,209
Tax burden as percent of gross revenues:		7.7%	32.5%	37.5%	1.5%	39.0%

#### OZARK PINEMEDSITE

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

Out-of-Pock	et Expenses:							
Age	Activity	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<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
ubtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
nnual Expense	es:							
Adminstration/	management.:	\$8	Yes	\$3	\$5	\$31	\$57	\$29
ubtotal (32 yrs	.):	\$256	u.	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
	**Interest rate	e used in computations is:	8.00%					

### Stop 1 Investment Expanses evoluting Appual Property Tax Harvest Age 22 Versel

### 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>	<u>Revenue</u>	Arkansas State Income Tax@ 7%	Fed. Income Income Tax@ 35%	Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
18	8.03	\$20.86	\$167	(\$12)	-	\$156	-	-
	(Cords)				(\$59) <sup>1</sup>	\$97	\$201	\$298
32	13.59	\$270.42	\$3,675	(\$257)	-	\$3,418	-	-
	(MBF Doyle)				(\$1,286) <sup>1</sup>	\$2,132	\$0	\$2,132
otal:		-	\$3,843	(\$269)	(\$1,345)	\$2,229	\$201	\$2,429

<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:	\$2,429
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before prop	perty tax:	\$2,071
4. Present value of net inc	come before property tax:	\$174
5. Annual ad valorem proj	perty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pay	yment:	(\$1.60)
Annual property tax pay	yment adjusted for fed. inc. tax deduction:	(\$1.04)
Total property tax paym	nents per harvest cycle:	(\$33)
Accrued interest on out	t-of-pocket tax payments per harvest cycle:	\$122
		•
6. Land value after proper	rty tax (adj. for income tax deduction):	\$160

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

		Total Tax	Payments:	Out-of-P	ocket Expenses	
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		\$51	-	\$33	\$122	\$156
Subtotal:		\$51	-	\$33	\$122	\$156
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$269	-	\$175	-	\$175
Federal Income Tax on harvest revenue @	35.0%	-	\$1,345	\$1,345	-	\$1,345
Subtotal:		\$269	\$1,345	\$1,520	-	\$1,520
Totals:		\$320	\$1,345	\$1,553	\$122	\$1,675
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.2%	43.6%

#### OZARK PINELOWSITE

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

Out-of-Pocke	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<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 Expenses	s:							
Adminstration/n	nanagement.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs.)	):	\$0	II	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8.00%					

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

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

Sta	and Harvest	Stumpage	Harvest	State and Federal T	ax Payments:			
<u> </u>	<u>ge Volume</u>	<u>Price</u>	<u>Revenue</u>	Arkansas State Income Tax@ 7%	Fed. Income Income Tax@ 35%	Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
			\$0	\$0	- \$0	\$0 \$0	- \$0	- \$0
34	11.16	\$270	\$3,017	(\$211)		\$2,806	-	-
	(MBF Doyle)				(\$1,056) <sup>1</sup>	\$1,750	\$0	\$1,750
Total:		-	\$3,017	(\$211)	(\$1,056)	\$1,750	\$0	\$1,750

<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:	\$1,750				
2. Out-of-pocket expense	s (silvicultural activities and taxes) and accrued interest:	\$0				
3. Net income before prop	perty tax:	\$1,750				
4. Present value of net inc	Present value of net income before property tax:					
5. Annual ad valorem proj	perty taxes:					
Property tax rate:	50 mills @ 20% assessment ratio	1.00%				
Annual property tax pay	yment:	(\$1.14)				
Annual property tax pay	yment adjusted for fed. inc. tax deduction:	(\$0.74)				
Total property tax paym	nents per harvest cycle:	(\$25)				
Accrued interest on out	t-of-pocket tax payments per harvest cycle:	\$106				
6. Land value after proper	Land value after property tax (adj. for income tax deduction):					

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

		Total Tax	Payments:	Out-of-P	ocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total	
Cost-increasing:							
Property taxes on land:		\$39	-	\$25	\$106	\$132	
Subtotal:		\$39	-	\$25	\$106	\$132	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$211	-	\$137	-	\$137	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,056	\$1,056	-	\$1,056	
Subtotal:		\$211	\$1,056	\$1,193	-	\$1,193	
Totals:		\$250	\$1,056	\$1,219	\$106	\$1,325	
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)

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<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	\$O	Yes	\$0	\$0	\$0	\$0	\$0
17	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
ubtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
nnual Expense	es:							
Adminstration/	management .:	<b>\$</b> 0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (40 yrs	.):	\$0	II	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8.00%					

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

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

Stand	Harvest	Stu	mpage	Harvest	State and Federal	Tax Payments:				
<u>Age</u>	<u>Volume</u>	F	Price	Revenue	Arkansas State Income Tax@ 7%	Fed. Income <u>Tax @ 35%</u>		Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
40	3.42 (Cords)	\$	20	\$70	(\$5)	- (\$24)		\$65 \$40	- \$0	- \$40
40	9.78	\$	238	\$2,325	(\$163)	-		\$2,162	-	-
	(MBF Doyle)					(\$814)	1	\$1,348	\$0	\$1,348
Fotal:		-		\$2,395	(\$168)	(\$838)		\$1,389	\$0	\$1,389

### Step 3 - Estimated Timberland Value per Acre

<ol> <li>Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:</li> <li>Net income before property tax:</li> <li>Present value of net income before property tax:</li> <li>Annual ad valorem property taxes:         <ul> <li>Property tax rate:</li> <li>50 mills @ 20% assessment ratio</li> </ul> </li> </ol>	\$0 \$1,389 \$59
<ol> <li>Present value of net income before property tax:</li> <li>Annual ad valorem property taxes:</li> </ol>	
5. Annual ad valorem property taxes:	\$59
Property tax rate: 50 mills @ 20% assessment ratio	
	1.00%
Annual property tax payment:	(\$0.55)
Annual property tax payment adjusted for fed. inc. tax deduction:	(\$0.35)
Total property tax payments per harvest cycle:	(\$14)
Accrued interest on out-of-pocket tax payments per harvest cycle:	\$90

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

		Total Tax	Payments:	Out-of-P	Out-of-Pocket Expenses	
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		\$22	-	\$14	\$90	\$104
Subtotal:		\$22	-	\$14	\$90	\$104
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$168	-	\$109	-	\$109
Federal Income Tax on harvest revenue @	35.0%	-	\$838	\$838	-	\$838
Subtotal:		\$168	\$838	\$947	-	\$947
Totals:		\$189	\$838	\$961	\$90	\$1,051
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

## **OZARK REGION:**

Cap Rate=

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	\$50	\$50	0%
2	\$140	\$135	-4%
3	\$125	\$120	-4%
4	\$110	\$105	-5%
5	\$70	\$70	0%
6	\$130	\$125	-4%
7	\$65	\$65	0%
8	\$100	\$100	0%
9	\$125	\$120	-4%
10	\$70	\$70	0%
11	\$120	\$115	-4%
12	\$150	\$145	-3%
13	\$145	\$140	-3%
14	\$130	\$125	-4%
15	\$130	\$125	-4%
16	\$125	\$120	-4%
17	\$70	\$70	0%
18	\$65	\$65	0%
			-2%

<u>8.00%</u>

# **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

### SOUTHWEST

CROP

	AVERAGE SOYBEAN	10 YEAR AVERAGE OF PRICES					0.00475		
	BUSHEL PER ACRE	RECEIVED BY FARMERS			APPLIED CAPITALI-	ROUNDED TO THE NEAREST	OLD RATE ROUNDED TO THE NEAREST		
			SUM	75/25 SPLIT	ZATION RATE 9.56%	\$5	\$5	DIFF	% DIFF
ACD 1	36	\$10.20	\$367.20	\$91.80	9.50% \$960.25	\$960	\$900	\$60	7%
ACD 1 ACD 2	31	\$10.20	\$316.20	\$79.05	\$826.88	\$825	\$300 \$775	\$50	6%
ACD 2 ACD 3	20	\$10.20	\$204.00	\$79.00 \$51.00	\$533.47	\$535	\$500	\$35	0 <i>%</i> 7%
ACD 3 ACD 4	20 27	\$10.20 \$10.20	\$204.00 \$275.40	\$68.85	\$720.19	\$335 \$720	\$500 \$675	\$35 \$45	7%
		•	•	•	•		•		
ACD 5	20	\$10.20	\$204.00	\$51.00	\$533.47	\$535	\$500	\$35	7%
ACD 6	15	\$10.20	\$153.00	\$38.25	\$400.10	\$400	\$375	\$25	7%
ACD 7	29	\$10.20	\$295.80	\$73.95	\$773.54	\$775	\$725	\$50	7%
ACD 8	29	\$10.20	\$295.80	\$73.95	\$773.54	\$775	\$725	\$50	7%
ACD 9	15	\$10.20	\$153.00	\$38.25	\$400.10	\$400	\$375	\$25	7%
ACD 10	29	\$10.20	\$295.80	\$73.95	\$773.54	\$775	\$725	\$50	7%
ACD 11	15	\$10.20	\$153.00	\$38.25	\$400.10	\$400	\$375	\$25	7%
ACD 12	27	\$10.20	\$275.40	\$68.85	\$720.19	\$720	\$675	\$45	7%
ACD 13	21	\$10.20	\$214.20	\$53.55	\$560.15	\$560	\$525	\$35	7%
ACD 14	21	\$10.20	\$214.20	\$53.55	\$560.15	\$560	\$525	\$35	7%
ACD 15						\$300	\$280	\$20	7%
ACD 16						\$240	\$225	\$15	7%
ACD 17						\$185	\$175	\$10	6%
ACD 18						\$115	\$110	\$5	5%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

### SOUTHWEST

### PASTURE

						OLD RATE		
		AVG \$ PER		APPLIED CAPITAL-	ROUNDED TO	ROUNDED TO THE NEAREST		
	AUM	AUM	TOTAL	IZATION RATE	NEAREST \$5	\$5	DIFF	% DIFF
	-		-	8.56%				
ACD 1	9.1	\$2.80	\$25.48	\$297.66	\$300	\$290	\$10	3%
ACD 2	8.1	\$2.80	\$22.68	\$264.95	\$265	\$255	\$10	4%
ACD 3	6.1	\$2.80	\$17.08	\$199.53	\$200	\$195	\$5	3%
ACD 4	7.2	\$2.80	\$20.16	\$235.51	\$235	\$230	\$5	2%
ACD 5	5.2	\$2.80	\$14.56	\$170.09	\$170	\$165	\$5	3%
ACD 6	5.2	\$2.80	\$14.56	\$170.09	\$170	\$165	\$5	3%
ACD 7	6.8	\$2.80	\$19.04	\$222.43	\$220	\$215	\$5	2%
ACD 8	5.5	\$2.80	\$15.40	\$179.91	\$180	\$175	\$5	3%
ACD 9	4	\$2.80	\$11.20	\$130.84	\$130	\$125	\$5	4%
ACD 10	5	\$2.80	\$14.00	\$163.55	\$165	\$160	\$5	3%
ACD 11	4.5	\$2.80	\$12.60	\$147.20	\$145	\$145	\$0	0%
ACD 12	7.9	\$2.80	\$22.12	\$258.41	\$260	\$250	\$10	4%
ACD 13	7.2	\$2.80	\$20.16	\$235.51	\$235	\$230	\$5	2%
ACD 14	6	\$2.80	\$16.80	\$196.26	\$195	\$190	\$5	3%
ACD 15	4.8	\$2.80	\$13.44	\$157.01	\$145	\$145	\$0	0%
ACD 16	3	\$2.80	\$8.40	\$98.13	\$100	\$95	\$5	5%
ACD 17	3	\$2.80	\$8.40	\$98.13	\$100	\$95	\$5	5%
ACD 18					\$75	\$75	\$0	0%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE USDA - ARKANSAS AGRICULTURAL STATISTICS

ASSESSMENT COORDINATION DEPARTMENT

### PINEHIGHSITE

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

	et Expenses:									
Age	<u>Activity</u>	Ex	<u>pense</u>		Fed. Tax	Fed. Tax	Net Expense	Accrued Inte	erest on	Acc. Total
					Deductible		<u>excl. Taxes</u>	Fed. Benefit	Net Out.	at Harvest
0	Prep./Plant	\$	174		No	\$0	\$174	\$0	\$1,743	\$1,917
3	Spray	\$	52		Yes	\$18	\$34	\$140	\$260	\$136
8	PCT	\$	89		Yes	\$31	\$58	\$150	\$278	\$155
18	Fert.	\$	83		Yes	\$29	\$54	\$47	\$87	\$65
26	Fert.				Yes	\$0	\$0	\$0	\$0	\$0
btotal:			\$398		-	\$79	\$320	\$337	\$2,369	\$2,273
nual Expense										
	management.:		\$10		Yes	\$4	\$7	\$32	\$60	\$31
btotal (30 yrs.	.):		\$300		"	\$105	\$195	\$334	\$619	\$376
otal:			\$698		-	\$184	\$515	\$671	\$2,988	\$2,649
	**Interest rate	used	l in comp	putations is:	8.00%					
			_							
	ues and Federa					( Poumonto:				
Stand	Harvest	Stur	npage	Harvest	State and Federal Tax			Not Incomo	Accrued	Total
		Stur				<u>(Payments:</u> Fed. Income <u>Tax @ 35%</u>		Net Income <u>After Tax</u>	Accrued Interest on Net	Total Income
Stand	Harvest <u>Volume</u>	Stur	npage	Harvest	State and Federal Tax Arkansas State	Fed. Income				
Stand <u>Age</u>	Harvest <u>Volume</u>	Stur <u>P</u>	npage <u>Price</u>	Harvest <u>Revenue</u>	State and Federal Ta: Arkansas State Income Tax@ 7%	Fed. Income	1	<u>After Tax</u>		
Stand <u>Age</u>	Harvest <u>Volume</u> 9.21 (Cords)	Stur <u>P</u>	npage <u>Price</u>	Harvest <u>Revenue</u>	State and Federal Ta: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%	1	<u>After Tax</u> \$219	Interest on Net	Income
Stand <u>Age</u> 16	Harvest <u>Volume</u> 9.21 (Cords)	Stur <u>F</u> \$	mpage <u>Price</u> 26	Harvest <u>Revenue</u> \$235	State and Federal Tax Arkansas State Income Tax@ 7% (\$16)	Fed. Income Tax @ 35%	1	<u>After Tax</u> \$219 \$136	Interest on Net	Income
Stand <u>Age</u> 16	Harvest <u>Volume</u> 9.21 (Cords) 3.78	Stur <u>F</u> \$	mpage <u>Price</u> 26	Harvest <u>Revenue</u> \$235	State and Federal Tax Arkansas State Income Tax@ 7% (\$16)	Fed. Income <u>Tax @ 35%</u> - (\$82)		<u>After Tax</u> \$219 \$136 \$1,166	Interest on Net - \$282 -	<u>Income</u> - \$418 -
Stand <u>Age</u> 16 23	Harvest <u>Volume</u> 9.21 (Cords) 3.78 (MBF Doyle)	Stur <u>F</u> \$	npage Price 26 331	Harvest <u>Revenue</u> \$235 \$1,254	<u>State and Federal Tax</u> Arkansas State <u>Income Tax@ 7%</u> (\$16) (\$88)	Fed. Income <u>Tax @ 35%</u> - (\$82)		<u>After Tax</u> \$219 \$136 \$1,166 \$727	Interest on Net - \$282 -	<u>Income</u> - \$418 -

<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:	\$4,992				
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	(\$2,649)				
3. Net income before pro	perty tax:	\$2,344				
4. Present value of net in	come before property tax:	\$234				
5. Annual ad valorem pro	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:	(\$1.41)				
Total property tax payr	ments per harvest cycle:	(\$42)				
Accrued interest on ou	ut-of-pocket tax payments per harvest cycle:	\$134				
6. Land value after prope	erty tax (adj. for income tax deduction):	\$216				

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

		Total Tax	Payments:	Out-of-P	ocket Expenses	
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		\$65	-	\$42	\$134	\$176
Subtotal:		\$65	-	\$42	\$134	\$176
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	\$486	-	\$316	-	\$316
Federal Income Tax on harvest revenue @	35.0%	-	\$2,290	\$2,290	-	\$2,290
Subtotal:		\$486	\$2,290	\$2,605	-	\$2,605
Totals:		\$551	\$2,290	\$2,648	\$134	\$2,782
Tax burden as percent of gross revenues:		7.9%	33.0%	38.1%	1.9%	40.1%

#### SOUTHWEST PINEMEDSITE

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

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<b>Benefit</b>	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
ubtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
nnual Expense	es:							
Adminstration/	management .:	\$8	Yes	\$3	\$5	\$31	\$57	\$29
ubtotal (32 yrs	.):	\$256	п	\$90	\$166	\$328	\$609	\$358
Total:		\$256	-	\$90	\$166	\$328	\$609	\$358
	**Interest rate	e used in computations is:	8.00%					

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

Stand	Harvest	Stumpage	Harvest	State and Federal 1	ax Payments:				
<u>Age</u>	Volume	Price	Revenue	Arkansas State Income Tax@ 7%	Fed. Income <u>Tax @ 35%</u>		Net Income <u>After Tax</u>	Accrued Interest on Net	Total <u>Income</u>
18	8.03	\$25.53	\$205	(\$14)	-		\$191	-	-
	(Cords)				(\$72)	1	\$119	\$245	\$364
32	13.59	\$331.44	\$4,504	(\$315)			\$4,189	-	-
	(MBF Doyle)				(\$1,577)	1	\$2,613	\$0	\$2,613
		-	\$4,709	(\$330)	(\$1,648)		\$2,731	\$245	\$2,977

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:	\$2,977
2. Out-of-pocket expenses	s (silvicultural activities and taxes) and accrued interest:	(\$358)
3. Net income before prop	perty tax:	\$2,619
4. Present value of net inc	come before property tax:	\$219
5. Annual ad valorem prop	perty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pay	(\$2.03)	
Annual property tax pay	ment adjusted for fed. inc. tax deduction:	(\$1.32)
Total property tax paym	nents per harvest cycle:	(\$42)
Accrued interest on out	\$155	
	ents per harvest cycle: -of-pocket tax payments per harvest cycle:	
. Land value after proper	\$203	

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

		Total Tax	Payments:	Out-of-P	ocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total	
Cost-increasing:							
Property taxes on land:		\$65	-	\$42	\$155	\$197	
Subtotal:		\$65	-	\$42	\$155	\$197	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$330	-	\$214	-	\$214	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,648	\$1,648	-	\$1,648	
Subtotal:		\$330	\$1,648	\$1,863	-	\$1,863	
Totals:		\$395	\$1,648	\$1,905	\$155	\$2,059	
Tax burden as percent of gross revenues:		8.4%	35.0%	40.4%	3.3%	43.7%	

#### SOUTHWEST PINELOWSITE

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

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<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
nnual Expense	es:							
Adminstration/	management.:	\$0	Yes	\$0	\$0	\$0	\$0	\$0
Subtotal (34 yrs.	.):	\$0	II	\$0	\$0	\$0	\$0	\$0
Total:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8.00%					

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

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

Sta	and Harvest	Stumpage	Harvest	State and Federal	Tax Payments:			
A	<u>ge</u> <u>Volume</u>	Price	Revenue	Arkansas State	Fed. Income	Net Income	Accrued	Total
				Income Tax@ 7%	<u>Tax @ 35%</u>	After Tax	Interest on Net	Income
		\$26	\$0	\$0	-	\$0	-	-
	(Cords)				\$0	\$0	\$0	\$0
34	11.16	\$331	\$3,698	(\$259)		\$3,439	-	-
	(MBF Doyle)	)			(\$1,294) <sup>1</sup>	\$2,145	\$0	\$2,145
Total:		-	\$3,698	(\$259)	(\$1,294)	\$2,145	\$0	\$2,145

### SOUTHWEST PINELOWSITE

### Step 3 - Estimated Timberland Value per Acre

1. Total Income including	accrued interest on net thinning income to final harvest:	\$2,145
2. Out-of-pocket expense	es (silvicultural activities and taxes) and accrued interest:	\$O
3. Net income before pro	\$2,145	
4. Present value of net in	\$151	
5. Annual ad valorem pro	operty taxes:	
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax pa	ayment:	(\$1.40)
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.91)
Total property tax payr	ments per harvest cycle:	(\$31)
Accrued interest on ou	\$130	
6. Land value after prope	erty tax (adj. for income tax deduction):	\$140

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

		Total Tax	Payments:	Out-of-P	ocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total	
Cost-increasing:							
Property taxes on land:		\$48	-	\$31	\$130	\$161	
Subtotal:		\$48	-	\$31	\$130	\$161	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$259	-	\$168	-	\$168	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,294	\$1,294	-	\$1,294	
Subtotal:		\$259	\$1,294	\$1,463	-	\$1,463	
Totals:		\$306	\$1,294	\$1,494	\$130	\$1,624	
Tax burden as percent of gross revenues:		8.3%	35.0%	40.4%	3.5%	43.9%	

#### SOUTHWEST HARDWOOD

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

Out-of-Pock	et Expenses:							
Age	<u>Activity</u>	<u>Expense</u>	Fed. Tax	Fed. Tax	Net Expense	Accrued Inter	est on	Acc. Total
			<b>Deductible</b>	<u>Benefit</u>	excl. Taxes	Fed. Benefit	Net Out.	at Harvest
0	Prep./Plant	\$O	No	\$0	\$0	\$0	\$0	\$0
3	Spray	\$O	Yes	\$0	\$0	\$0	\$0	\$0
8	PCT	\$O	Yes	\$0	\$0	\$0	\$0	\$0
17	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
24	Fert.	\$0	Yes	\$0	\$0	\$0	\$0	\$0
ubtotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
nual Expense	s:							
Adminstration/r	management.:	<b>\$</b> 0	Yes	\$0	\$0	\$0	\$0	\$0
ubtotal (40 yrs.	.):	\$0	II	\$0	\$0	\$0	\$0	\$0
Fotal:		\$0	-	\$0	\$0	\$0	\$0	\$0
	**Interest rate	used in computations is:	8.00%					

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

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

	Stand	Harvest	Stu	impage	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>	<u>After Tax</u>	Interest on Net	Income
	40	3.42	\$	38	\$130	(\$9)	-	\$121	-	-
		(Cords)					(\$46)	\$76	\$0	\$76
	40	9.78	\$	292	\$2,859	(\$200)	-	\$2,659	-	-
		(MBF Doyle)					(\$1,001) <sup>1</sup>	\$1,658	\$0	\$1,658
Total:			-		\$2,989	(\$209)	(\$1,046)	\$1,734	\$0	\$1,734

### SOUTHWEST HARDWOOD

### Step 3 - Estimated Timberland Value per Acre

1. Total Income including	g accrued interest on net thinning income to final harvest:	\$1,734					
2. Out-of-pocket expension	es (silvicultural activities and taxes) and accrued interest:	\$0					
3. Net income before pro	3. Net income before property tax:						
4. Present value of net in	4. Present value of net income before property tax:						
5. Annual ad valorem pro	operty taxes:						
Property tax rate:	50 mills @ 20% assessment ratio	1.00%					
Annual property tax pa	ayment:	(\$0.68)					
Annual property tax pa	ayment adjusted for fed. inc. tax deduction:	(\$0.44)					
Total property tax pay	ments per harvest cycle:	(\$18)					
Accrued interest on o	Accrued interest on out-of-pocket tax payments per harvest cycle:						
6. Land value after prope	erty tax (adj. for income tax deduction):	\$68					

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

		Total Tax Payments:		Out-of-P	Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total	
Cost-increasing:							
Property taxes on land:		\$27	-	\$18	\$113	\$130	
Subtotal:		\$27	-	\$18	\$113	\$130	
Revenue-reducing:							
Arkansas State Income Tax on harvest revenue @	7.0%	\$209	-	\$136	-	\$136	
Federal Income Tax on harvest revenue @	35.0%	-	\$1,046	\$1,046	-	\$1,046	
Subtotal:		\$209	\$1,046	\$1,182	-	\$1,182	
Totals:		\$237	\$1,046	\$1,200	\$113	\$1,313	
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%	

## **SOUTHWEST REGION TIMBER:**

Cap Rate=	<u>8.00%</u>
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ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
-			
1	\$90	\$90	0%
2	\$170	\$165	-3%
3	\$210	\$205	-2%
4	\$195	\$180	-8%
5	\$95	\$95	0%
6	\$210	\$205	-2%
7	\$195	\$180	-8%
8	\$70	\$70	0%
9	\$160	\$155	-3%
10	\$65	\$70	8%
11	\$150	\$145	-3%
12	\$200	\$190	-5%
13	\$210	\$200	-5%
14	\$205	\$195	-5%
15	\$190	\$180	-5%
16	\$180	\$175	-3%
17	\$95	\$95	0%
18	\$75	\$75	0%
•			-2%

# **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

#### CROP AND PASTURE RATES

Crop				Pasture							Capitalization Rate		
			Rental Rate		Pasture Cap R	Rate Mu	ultiplier						
			Multiplier		8.56%								
			25.00%										
					Delta States	LA		MS	Averge	Reported		_	_
			9.56%									Crop	Pasture
			Crop Cap Rate								Safe Rate		
			Multiplier	2005		1	6.5	16.5	16.5		10 Year Average of		
				2006			19	16	17.5		the 30 Year T-Bond	4.06%	4.06%
				2007			23	18	20.5				
				2008			27	18.5	22.75	21.5			
				2009**	ı	na	na		19	19	Industry Risk Rate	3.50%	3.50%
soybe	an prio	es		2010	· · ·	na	na		16	16			
2	2005	5.92		2011	r	na	na		16	16	Management Rate	2.00%	1.00%
2	2006	6.41		2012					18	18			
	2007	9.02											
	800	9.64		_	TE AVERAGE	AUM	PA	STURE R					
	009	9.66		7.7	DELTA			16.5	2005				
	010	10.9		5.3	OUACHITA			17.5	2006			0.500/	0.500/
	011	12.3	Soybean	6	OZARK			20.5	2007		Capitalization Rate	9.56%	8.56%
	012 013	14.3 13.1	average	6.8 <b>6.5</b>	SOUTHWEST			21	2008 2009			9.56%	8.56%
	:013 :014	10.7	price multiplier	0.0	AVERAGE			19 16	2009				
-		\$10.20 10 yr	\$10.20					16	2010				
		\$12.26 last 5 yr	<b>\$10.20</b>		AVG AUM REI	NTAL		18	2012				
		\$12.70 last 3 yr			VALUE PER			18	2013				
		, , ,			ACRE			18	2014				
					\$2.80								
								18.05 1	0 yr avera	age			
					\$2.80				ast 5 avg				
								18 la	ast 3 avg				

### Timber Mart-South Stumpage Price Data

YEAR		ne imber		ak imber	Doyle Mixed Hardwood	ł	Average Hardwood	d		Cord <b>ne</b> wood		Cord <b>wood</b> wood
	Reg. 1	<u>Reg. 2</u>	<u>Reg. 1</u>	Reg. 2	<u>Reg. 1</u>	Reg. 2	Reg. 1	<u>Reg. 2</u>	<u>Reg. 1</u>	Reg. 2	Reg. 1	Reg. 2
2005	\$ 472.12	\$ 367.18	\$ 337.14	\$ 306.25	\$256.11	\$ 193.64	\$ 296.63	\$ 249.94	\$ 23.80	\$ 16.51	\$ 31.70	\$ 13.43
2006	\$ 443.09	\$ 364.39	\$ 272.30	\$ 263.64	\$210.79	\$ 178.50	\$ 241.54	\$ 221.07	\$ 19.97	\$ 14.04	\$ 24.45	\$ 10.53
2007	\$ 479.60	\$ 336.46	\$ 376.16	\$270.64	\$ 260.23	\$215.43	\$ 318.19	\$ 243.03	\$ 27.28	\$ 25.89	\$ 34.89	\$ 18.13
2008	\$ 341.44	\$ 263.64	\$ 314.21	\$ 259.26	\$ 238.96	\$ 166.16	\$ 276.59	\$212.71	\$ 31.01	\$ 28.03	\$ 39.70	\$ 22.97
2009	\$291.17	\$232.12	\$278.78	\$ 208.34	\$216.48	\$ 182.35	\$247.63	\$ 195.34	\$ 27.44	\$ 23.05	\$ 39.76	\$ 25.23
2010	\$ 284.89	\$261.25	\$ 300.91	\$237.74	\$ 260.75	\$ 201.95	\$ 280.83	\$219.84	\$ 31.84	\$ 25.67	\$ 46.49	\$ 29.67
2011	\$ 253.34	\$ 221.63	\$298.11	\$ 281.84	\$ 222.08	\$182.26	\$ 260.09	\$ 232.05	\$ 21.12	\$ 19.32	\$ 29.12	\$ 21.58
2012	\$ 237.48	\$ 208.76	\$ 318.85	\$ 303.28	\$ 254.45	\$ 182.35	\$ 286.65	\$ 242.81	\$ 24.09	\$ 17.47	\$ 38.34	\$ 17.57
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
10 YEAR AVG	\$ 331.44	\$ 270.42	\$ 336.93	\$ 279.03	\$ 247.83	\$ 196.52	\$ 292.38	\$ 237.77	\$ 25.53	\$ 20.86	\$ 38.13	\$ 20.39

NOTES:

# FORESTRY RELATED COSTS

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

**NOTE:** Timber Costs are acquired from a independent source and are only calculated for even numbered years and published in odd numbered years. \* Data source reported that not enough data was present for a PCT number for this years report. An avergage of the last four reports was used.

# **Timber Growth/Yield Information**



### 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)