2014 Cropland, Pastureland and Timberland Valuation for Property Tax Purposes

Arkansas Assessment Coordination Department

October 15, 2013

STATE OF ARKANSAS

ASSESSMENT COORDINATION DEPARTMENT

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

Debra Asbury
Director

October 15, 2013

To: The Honorable John Charles Edwards
To: The Honorable Bill Sample

This report is presented pursuant to ACT 994 from the 2007 legislative session which requires that ACD report any changes to the agricultural use valuation formula for property tax purposes to Legislative Council by October 15th 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 2014.

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

If you have any questions about any part of Act 994 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
Robert.McGee@acd.state.ar.us

Table of Contents

ACD Agricultural Guidelines 1-8

Map of ACD Agricultural Regions 4

Delta Region 9-20

Ouachita Region..... 21-32

Ozark Region..... 33-44

Southwest Region 45-56

Crop and Pasture Rates..... 57

Timber Rates..... 58-60

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

In compliance with Arkansas Code 26-26-407

Developed By
The State Of Arkansas
Assessment Coordination
Department
1996

Revised 2013

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

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

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

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

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

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

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

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

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

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

The Big Picture

The Agricultural Land mass appraisal program launched in 1981 developed seventy-five individual county land values based on published information by the Arkansas Agricultural Statistics Service and the Natural Resource and Conservation Service. In an effort to eliminate some of the variables and inconsistencies, in 1996 the introduction of Regional Land Values for the state of Arkansas was implemented.

REGIONS

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

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

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

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

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

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

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

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

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

REGIONAL MAP NEXT PAGE

SOIL GROUPINGS

The soil groupings are based on the NRCS Land Capability Classification System. This system measures the limitations of soils using eight classes. Class I being the least limited and VIII being the most restrictive. The sub class describes the type of limitation be it W-water, E-erosion, and S-shallow or unstable soils. NRCS has published, or is in the process of publishing, a soil survey for each county in Arkansas. Within these surveys each soil is described and is designated a capability class and a subclass. The surveys also contain aerial photographs which depicts where soils are located within the county.

The descriptions are as follows:
(See next page)

ACD Numbers and Interpretations

ACD#	LAND CAPABILITY CLASSIFICATION
1	**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 CLASS OR MISC. LAND**

LETTERS INDICATE LIMITATIONS (PROBLEMS) ASSOCIATED WITH THOSE SOILS.

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

Formulas for Land Values

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

Code 26-26-407 clearly indicates that the use valuation of land should be used for agricultural lands. This method is otherwise known as the income approach to value. The basic formula for this is:

Income - Cost = Net Income / Capitalization Rate = Land Value

Yields

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

Crops

Crop Income is based on a ten year market price average for soybeans which for this report was $9.12. 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.

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:

State Average AUM	6.5
10 yr. Pasture Rent Average	$17.60

$17.60/ 6.5 = $2.73 per AUM Statewide

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

Timber

Because of the thirty to forty year growth cycle of marketable timber and the variable growth volumes for each year a discount cash flow model was used to best represent the use value. This model takes into consideration the 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). The soils value is then determined by multiplying total acres to determine total value. An example of each is below:

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

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

Example of weighted value below:

ACD #3 Ozark Region

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

Capitalization Rate for Cropland

Safe Rate	(10 year average on 30 Year T-Bonds)	4.38%
Industry Risk Rate		3.5%
Management Rate		2.00%
Capitalization Rate		**9.88%**

Capitalization Rate for Pasture

Safe Rate	(10 year average on 30 Year T-Bonds)	4.38%
Industry Risk Rate		3.5%
Management Rate		1.00%
Capitalization Rate		**8.88%**

Capitalization Rate for Timber

Safe Rate	(10 year average on 30 Year T-Bonds)	4.38%
Industry Risk Rate		3.00%
Management Rate		0.00%
Capitalization Rate		**8.00%***

*Due to Arkansas Code 26-26-407 subdivision (f) (3) (C) the Capitalization Rate cannot be lower than 8. The actual calculated rate for 2011 was 7.38%.

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

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
					9.88%				
ACD 1	39	$9.12	$355.68	$88.92	$900.00	**$900**	**$790**	**$110**	14%
ACD 2	35	$9.12	$319.20	$79.80	$807.69	**$810**	**$710**	**$100**	14%
ACD 3	18	$9.12	$164.16	$41.04	$415.38	**$415**	**$365**	**$50**	14%
ACD 4	32	$9.12	$291.84	$72.96	$738.46	**$740**	**$650**	**$90**	14%
ACD 5	30	$9.12	$273.60	$68.40	$692.31	**$690**	**$610**	**$80**	13%
ACD 6	14	$9.12	$127.68	$31.92	$323.08	**$325**	**$285**	**$40**	14%
ACD 7	29	$9.12	$264.48	$66.12	$669.23	**$670**	**$590**	**$80**	14%
ACD 8	29	$9.12	$264.48	$66.12	$669.23	**$670**	**$590**	**$80**	14%
ACD 9	14	$9.12	$127.68	$31.92	$323.08	**$325**	**$285**	**$40**	14%
ACD 10	29	$9.12	$264.48	$66.12	$669.23	**$670**	**$590**	**$80**	14%
ACD 11	14	$9.12	$127.68	$31.92	$323.08	**$325**	**$285**	**$40**	14%
ACD 12	31	$9.12	$282.72	$70.68	$715.38	**$715**	**$630**	**$85**	13%
ACD 13	24	$9.12	$218.88	$54.72	$553.85	**$555**	**$485**	**$70**	14%
ACD 14	22	$9.12	$200.64	$50.16	$507.69	**$510**	**$445**	**$65**	15%
ACD 15						**$250**	**$220**	**$30**	14%
ACD 16						**$205**	**$180**	**$25**	14%
ACD 17						**$150**	**$135**	**$15**	11%
ACD 18						**$105**	**$95**	**$10**	11%
							Avg. Diff.	$72	14%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE
ARKANSAS AGRICULTURAL STATISTICS
*Avg Diff. $ value and % does not use soil types without avg. bushel data

PASTURE

	AUM	AVG $ PER AUM	TOTAL	APPLIED CAPITAL-IZATION RATE	ROUNDED TO NEAREST $5	OLD RATE ROUNDED TO THE NEAREST $5	DIFF	% DIFF
				8.88%				
ACD 1	9.9	$2.73	$27.03	$304.36	**$305**	$295	**$10**	3%
ACD 2	8.4	$2.73	$22.93	$258.24	**$260**	$250	**$10**	4%
ACD 3	5.2	$2.73	$14.20	$159.86	**$160**	$155	**$5**	3%
ACD 4	7.4	$2.73	$20.20	$227.50	**$230**	$220	**$10**	5%
ACD 5	7.1	$2.73	$19.38	$218.28	**$220**	$210	**$10**	5%
ACD 6	4.1	$2.73	$11.19	$126.05	**$125**	$125	**$0**	0%
ACD 7	6.7	$2.73	$18.29	$205.98	**$205**	$200	**$5**	3%
ACD 8	5.5	$2.73	$15.02	$169.09	**$170**	$165	**$5**	3%
ACD 9	4	$2.73	$10.92	$122.97	**$125**	$120	**$5**	4%
ACD 10	5.5	$2.73	$15.02	$169.09	**$170**	$165	**$5**	3%
ACD 11	3.5	$2.73	$9.56	$107.60	**$110**	$105	**$5**	5%
ACD 12	8.8	$2.73	$24.02	$270.54	**$270**	$260	**$10**	4%
ACD 13	7.7	$2.73	$21.02	$236.72	**$235**	$230	**$5**	2%
ACD 14	6.2	$2.73	$16.93	$190.61	**$190**	$185	**$5**	3%
ACD 15	4.7	$2.73	$12.83	$144.49	**$145**	$140	**$5**	4%
ACD 16	4.7	$2.73	$12.83	$144.49	**$145**	$140	**$5**	4%
ACD 17	4.7	$2.73	$12.83	$144.49	**$145**	$140	**$5**	4%
ACD 18					**$75**	$75	**$0**	0%
						Avg. Diff.	$6	3%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE
ARKANSAS AGRICULTURAL STATISTICS
*Avg Diff. $ value and % does not use soil types without AUM data

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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total at Harvest
0	Prep./Plant	$ 171	No	$0	$171	$0	$1,711	$1,882
3	Spray	$ 60	Yes	$21	$39	$161	$300	$156
8	PCT	$ 86	Yes	$30	$56	$145	$270	$150
18	Fert.	$ 77	Yes	$27	$50	$44	$81	$61
26	Fert.		Yes	$0	$0	$0	$0	$0
Subtotal:		$394	-	$78	$316	$350	$2,362	$2,249
Annual Expenses:								
Adminstration/management.:		$10	Yes	$4	$7	$32	$60	$31
Subtotal (30 yrs.):		$300	"	$105	$195	$334	$619	$376
Total:		$694	-	$183	$511	$684	$2,981	$2,625

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
16	9.21	$ 22	$200	($14)	-		$186	-	-
	(Cords)				($70)	[1]	$116	$240	$356
23	3.78	$ 325	$1,228	($86)	-		$1,142	-	-
	(MBF Doyle)				($430)	[1]	$712	$535	$1,247
30	16.45	$ 325	$5,340	($374)	-		$4,966	-	-
	(MBF Doyle)				($1,731)	[1]	$3,235	$0	$3,235
Total:		-	$6,768	($474)	($2,231)		$3,351	$774	$4,838

[1] 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:		$4,838
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		($2,625)
3. Net income before property tax:		$2,213
4. Present value of net income before property tax:		$221
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($2.04)
Annual property tax payment adjusted for fed. inc. tax deduction:		($1.33)
Total property tax payments per harvest cycle:		($40)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$126
6. Land value after property tax (adj. for income tax deduction):		**$204**

Step 4 - Tax Burden on High Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$61	-	$40	$126	$166
Subtotal:		$61	-	$40	$126	$166
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$474	-	$308	-	$308
Federal Income Tax on harvest revenue @	35.0%	-	$2,231	$2,231	-	$2,231
Subtotal:		$474	$2,231	$2,539	-	$2,539
Totals:		$535	$2,231	$2,578	$126	$2,705
Tax burden as percent of gross revenues:		7.9%	33.0%	38.1%	1.9%	40.0%

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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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 Expenses:								
Adminstration/management.:		$8	Yes	$3	$5	$31	$57	$29
Subtotal (32 yrs.):		$256	"	$90	$166	$328	$609	$358
Total:		$256	-	$90	$166	$328	$609	$358

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
18	8.03	$21.71	$174	($12)	-		$162	-	-
	(Cords)				($61)	[1]	$101	$209	$310
32	13.59	$324.63	$4,412	($309)	-		$4,103	-	-
	(MBF Doyle)				($1,544)	[1]	$2,559	$0	$2,559
Total:		-	$4,586	($321)	($1,605)		$2,660	$209	$2,869

[1] 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:		$2,869
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		($358)
3. Net income before property tax:		$2,511
4. Present value of net income before property tax:		$210
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($1.95)
Annual property tax payment adjusted for fed. inc. tax deduction:		($1.26)
Total property tax payments per harvest cycle:		($40)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$148
6. Land value after property tax (adj. for income tax deduction):		**$195**

Step 4 - Tax Burden on Medium Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$62	-	$40	$148	$189
Subtotal:		$62	-	$40	$148	$189
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$321	-	$209	-	$209
Federal Income Tax on harvest revenue @	35.0%	-	$1,605	$1,605	-	$1,605
Subtotal:		$321	$1,605	$1,814	-	$1,814
Totals:		$383	$1,605	$1,854	$148	$2,003
Tax burden as percent of gross revenues:		8.4%	35.0%	40.4%	3.2%	43.7%

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-Pocket Expenses:

Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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:								
Adminstration/management.:		$0	Yes	$0	$0	$0	$0	$0
Subtotal (34 yrs.):		$0	"	$0	$0	$0	$0	$0
Total:		$0	-	$0	$0	$0	$0	$0

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
		$22	$0	$0	-		$0	-	-
	(Cords)				$0		$0	$0	$0
34	11.16	$325	$3,622	($254)			$3,369	-	-
	(MBF Doyle)				($1,268)	1	$2,101	$0	$2,101
Total:		-	$3,622	($254)	($1,268)		$2,101	$0	$2,101

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$2,101
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		$0
3. Net income before property tax:		$2,101
4. Present value of net income before property tax:		$148
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($1.37)
Annual property tax payment adjusted for fed. inc. tax deduction:		($0.89)
Total property tax payments per harvest cycle:		($30)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$128
6. Land value after property tax (adj. for income tax deduction):		**$137**

Step 4 - Tax Burden on Low Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$47	-	$30	$128	$158
Subtotal:		$47	-	$30	$128	$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:		$300	$1,268	$1,463	$128	$1,591
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-Pocket Expenses:

Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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 Expenses:								
Adminstration/management.:		$0	Yes	$0	$0	$0	$0	$0
Subtotal (40 yrs.):		$0	"	$0	$0	$0	$0	$0
Total:		$0	-	$0	$0	$0	$0	$0

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
40	3.42	$ 25	$86	($6)	-		$80	-	-
	(Cords)				($30)		$50	$0	$50
40	9.78	$ 252	$2,463	($172)	-		$2,291	-	-
	(MBF Doyle)				($862)	1	$1,429	$0	$1,429
Total:		-	$2,550	($178)	($892)		$1,479	$0	$1,479

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$1,479
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		$0
3. Net income before property tax:		$1,479
4. Present value of net income before property tax:		$63
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($0.58)
Annual property tax payment adjusted for fed. inc. tax deduction:		($0.38)
Total property tax payments per harvest cycle:		($15)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$96
6. Land value after property tax (adj. for income tax deduction):		**$58**

Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$23	-	$15	$96	$111
Subtotal:		$23	-	$15	$96	$111
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$178	-	$116	-	$116
Federal Income Tax on harvest revenue @	35.0%	-	$892	$892	-	$892
Subtotal:		$178	$892	$1,008	-	$1,008
Totals:		$202	$892	$1,024	$96	$1,120
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

DELTA REGION TIMBER:

Cap Rate= **8.00%**

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	$60	$60	0%
2	$100	$100	0%
3	$90	$90	0%
4	$100	$100	0%
5	$55	$60	9%
6	$125	$120	-4%
7	$80	$75	-6%
8	$85	$85	0%
9	$140	$135	-4%
10	$110	$105	-5%
11	$150	$145	-3%
12	$150	$145	-3%
13	$185	$180	-3%
14	$185	$175	-5%
15	$185	$175	-5%
16	$210	$195	-7%
17	$110	$105	-5%
18	$65	$65	0%
			-2%

DCF's Harvest Volume by Region

Delta Region:

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

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
					9.88%				
ACD 1	39	$9.12	$355.68	$88.92	$900.00	**$900**	$790	**$110**	14%
ACD 2	31	$9.12	$282.72	$70.68	$715.38	**$715**	$630	**$85**	13%
ACD 3	18	$9.12	$164.16	$41.04	$415.38	**$415**	$365	**$50**	14%
ACD 4	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 5	18	$9.12	$164.16	$41.04	$415.38	**$415**	$365	**$50**	14%
ACD 6	18	$9.12	$164.16	$41.04	$415.38	**$415**	$365	**$50**	14%
ACD 7	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 8	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 9	18	$9.12	$164.16	$41.04	$415.38	**$415**	$365	**$50**	14%
ACD 10	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 11	15	$9.12	$136.80	$34.20	$346.15	**$345**	$305	**$40**	13%
ACD 12	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 13	20	$9.12	$182.40	$45.60	$461.54	**$460**	$405	**$55**	14%
ACD 14	20	$9.12	$182.40	$45.60	$461.54	**$460**	$405	**$55**	14%
ACD 15						**$260**	$230	**$30**	13%
ACD 16						**$210**	$185	**$25**	14%
ACD 17						**$160**	$140	**$20**	14%
ACD 18						**$105**	$95	**$10**	11%
							Avg. Diff.	$66	13%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE

ARKANSAS AGRICULTURAL STATISTICS

*Avg Diff. $ value and % does not use soil types without avg. bushel data

ASSESSMENT COORDINATION DEPARTMENT

PASTURE

	AUM	AVG $ PER AUM	TOTAL	CAPITAL-IZATION RATE	ROUNDED TO NEAREST $5	OLD RATE ROUNDED TO THE NEAREST $5	DIFF	% DIFF
				8.88%				
ACD 1	8.4	$2.73	$22.93	$258.24	**$260**	$250	**$10**	4%
ACD 2	7.7	$2.73	$21.02	$236.72	**$235**	$230	**$5**	2%
ACD 3	5.1	$2.73	$13.92	$156.79	**$155**	$150	**$5**	3%
ACD 4	6.3	$2.73	$17.20	$193.68	**$195**	$185	**$10**	5%
ACD 5	5.1	$2.73	$13.92	$156.79	**$155**	$150	**$5**	3%
ACD 6	4.2	$2.73	$11.47	$129.12	**$130**	$125	**$5**	4%
ACD 7	6.7	$2.73	$18.29	$205.98	**$205**	$200	**$5**	3%
ACD 8	6.1	$2.73	$16.65	$187.53	**$190**	$180	**$10**	6%
ACD 9	3.9	$2.73	$10.65	$119.90	**$120**	$115	**$5**	4%
ACD 10	6.7	$2.73	$18.29	$205.98	**$205**	$200	**$5**	3%
ACD 11	4.2	$2.73	$11.47	$129.12	**$130**	$125	**$5**	4%
ACD 12	6.9	$2.73	$18.84	$212.13	**$210**	$205	**$5**	2%
ACD 13	6.4	$2.73	$17.47	$196.76	**$195**	$190	**$5**	3%
ACD 14	5.1	$2.73	$13.92	$156.79	**$155**	$150	**$5**	3%
ACD 15	4.2	$2.73	$11.47	$129.12	**$130**	$125	**$5**	4%
ACD 16	4.2	$2.73	$11.47	$129.12	**$130**	$125	**$5**	4%
ACD 17	4.2	$2.73	$11.47	$129.12	**$130**	$125	**$5**	4%
ACD 18					**$75**	$75	**$0**	0%
						Avg. Diff.	$6	4%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE

ARKANSAS AGRICULTURAL STATISTICS

*Avg Diff. $ value and % does not use soil types without AUM data

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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total at Harvest
0	Prep./Plant	$171	No	$0	$171	$0	$1,711	$1,882
3	Spray	$60	Yes	$21	$39	$161	$300	$156
8	PCT	$86	Yes	$30	$56	$145	$270	$150
18	Fert.	$77	Yes	$27	$50	$44	$81	$61
26	Fert.		Yes	$0	$0	$0	$0	$0
Subtotal:		$394	-	$78	$316	$350	$2,362	$2,249
Annual Expenses:								
Adminstration/management.:		$10	Yes	$4	$7	$32	$60	$31
Subtotal (30 yrs.):		$300	"	$105	$195	$334	$619	$376
Total:		$694	-	$183	$511	$684	$2,981	$2,625

**Interest rate used in computations is: 8.0%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
16	9.21	$ 24	$220	($15)	-		$205	-	-
	(Cords)				($77)	[1]	$128	$263	$391
23	3.78	$ 356	$1,349	($94)	-		$1,254	-	-
	(MBF Doyle)				($472)	[1]	$782	$587	$1,369
30	16.45	$ 356	$5,863	($410)	-		$5,453	-	-
	(MBF Doyle)				($1,914)	[1]	$3,539	$0	$3,539
Total:		-	$7,432	($520)	($2,463)		$3,666	$851	$5,299

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

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$5,299
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		($2,625)
3. Net income before property tax:		$2,674
4. Present value of net income before property tax:		$267
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($2.47)
Annual property tax payment adjusted for fed. inc. tax deduction:		($1.60)
Total property tax payments per harvest cycle:		($48)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$153
6. Land value after property tax (adj. for income tax deduction):		**$247**

Step 4 - Tax Burden on High Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$74	-	$48	$153	$201
Subtotal:		$74	-	$48	$153	$201
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$520	-	$338	-	$338
Federal Income Tax on harvest revenue @	35.0%	-	$2,463	$2,463	-	$2,463
Subtotal:		$520	$2,463	$2,801	-	$2,801
Totals:		$594	$2,463	$2,849	$153	$3,002
Tax burden as percent of gross revenues:		8.0%	33.1%	38.3%	2.1%	40.4%

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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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 Expenses:								
Adminstration/management.:		$8	Yes	$3	$5	$31	$57	$29
Subtotal (32 yrs.):		$256	"	$90	$166	$328	$609	$358
Total:		$256	-	$90	$166	$328	$609	$358

**Interest rate used in computations is: 8.0%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
18	8.03	$23.88	$192	($13)	-		$178	-	-
	(Cords)				($67)	[1]	$111	$230	$341
32	13.59	$356.48	$4,845	($339)	-		$4,506	-	-
	(MBF Doyle)				($1,696)	[1]	$2,810	$0	$2,810
Total:		-	$5,037	($353)	($1,763)		$2,921	$230	$3,151

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

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$3,151
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		($358)
3. Net income before property tax:		$2,793
4. Present value of net income before property tax:		$234
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($2.16)
Annual property tax payment adjusted for fed. inc. tax deduction:		($1.41)
Total property tax payments per harvest cycle:		($45)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$165
6. Land value after property tax (adj. for income tax deduction):		**$216**

Step 4 - Tax Burden on Medium Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$69	-	$45	$165	$210
Subtotal:		$69	-	$45	$165	$210
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$353	-	$229	-	$229
Federal Income Tax on harvest revenue @	35.0%	-	$1,763	$1,763	-	$1,763
Subtotal:		$353	$1,763	$1,992	-	$1,992
Totals:		$422	$1,763	$2,037	$165	$2,202
Tax burden as percent of gross revenues:		8.4%	35.0%	40.4%	3.3%	43.7%

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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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:								
Adminstration/management.:		$0	Yes	$0	$0	$0	$0	$0
Subtotal (34 yrs.):		$0	"	$0	$0	$0	$0	$0
Total:		$0	-	$0	$0	$0	$0	$0

**Interest rate used in computations is: 8.0%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
		$24	$0	$0	-		$0	-	-
	(Cords)				$0		$0	$0	$0
34	11.16	$356	$3,978	($278)			$3,699	-	-
	(MBF Doyle)				($1,392)	1	$2,307	$0	$2,307
Total:		-	$3,978	($278)	($1,392)		$2,307	$0	$2,307

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$2,307
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		$0
3. Net income before property tax:		$2,307
4. Present value of net income before property tax:		$163
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($1.50)
Annual property tax payment adjusted for fed. inc. tax deduction:		($0.98)
Total property tax payments per harvest cycle:		($33)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$140
6. Land value after property tax (adj. for income tax deduction):		**$150**

Step 4 - Tax Burden on Low Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$51	-	$33	$140	$173
Subtotal:		$51	-	$33	$140	$173
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$278	-	$181	-	$181
Federal Income Tax on harvest revenue @	35.0%	-	$1,392	$1,392	-	$1,392
Subtotal:		$278	$1,392	$1,573	-	$1,573
Totals:		$330	$1,392	$1,606	$140	$1,747
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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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 Expenses:								
Adminstration/management.:		$0	Yes	$0	$0	$0	$0	$0
Subtotal (40 yrs.):		$0	"	$0	$0	$0	$0	$0
Total:		$0	-	$0	$0	$0	$0	$0

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
40	3.42	$ 32	$110	($8)	-		$102	-	-
	(Cords)				($38)		$64	$0	$64
40	9.78	$ 273	$2,668	($187)	-		$2,481	-	-
	(MBF Doyle)				($934)	1	$1,548	$0	$1,548
Total:		-	$2,778	($194)	($972)		$1,611	$0	$1,611

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$1,611
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		$0
3. Net income before property tax:		$1,611
4. Present value of net income before property tax:		$68
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($0.63)
Annual property tax payment adjusted for fed. inc. tax deduction:		($0.41)
Total property tax payments per harvest cycle:		($16)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$105
6. Land value after property tax (adj. for income tax deduction):		**$63**

Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$25	-	$16	$105	$121
Subtotal:		$25	-	$16	$105	$121
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$194	-	$126	-	$126
Federal Income Tax on harvest revenue @	35.0%	-	$972	$972	-	$972
Subtotal:		$194	$972	$1,099	-	$1,099
Totals:		$220	$972	$1,115	$105	$1,220
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

OUACHITA REGION TIMBER:

Cap Rate= 8.00%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	$60	$65	8%
2	$200	$195	-3%
3	$60	$65	8%
4	$135	$130	-4%
5	$100	$100	0%
6	$140	$135	-4%
7	$135	$125	-7%
8	$105	$100	-5%
9	$160	$155	-3%
10	$100	$100	0%
11	$160	$155	-3%
12	$195	$190	-3%
13	$195	$190	-3%
14	$190	$185	-3%
15	$170	$165	-3%
16	$180	$175	-3%
17	$100	$100	0%
18	$70	$70	0%
			-1%

DCF's Harvest Volume by Region

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

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
					9.88%				
ACD 1	38	$9.12	$346.56	$86.64	$876.92	**$875**	$770	**$105**	14%
ACD 2	31	$9.12	$282.72	$70.68	$715.38	**$715**	$630	**$85**	13%
ACD 3	23	$9.12	$209.76	$52.44	$530.77	**$530**	$465	**$65**	14%
ACD 4	29	$9.12	$264.48	$66.12	$669.23	**$670**	$590	**$80**	14%
ACD 5	23	$9.12	$209.76	$52.44	$530.77	**$530**	$465	**$65**	14%
ACD 6	15	$9.12	$136.80	$34.20	$346.15	**$345**	$305	**$40**	13%
ACD 7	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 8	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 9	15	$9.12	$136.80	$34.20	$346.15	**$345**	$305	**$40**	13%
ACD 10	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 11	15	$9.12	$136.80	$34.20	$346.15	**$345**	$305	**$40**	13%
ACD 12	28	$9.12	$255.36	$63.84	$646.15	**$645**	$570	**$75**	13%
ACD 13	20	$9.12	$182.40	$45.60	$461.54	**$460**	$405	**$55**	14%
ACD 14	20	$9.12	$182.40	$45.60	$461.54	**$460**	$405	**$55**	14%
ACD 15						**$260**	$230	**$30**	13%
ACD 16						**$210**	$185	**$25**	14%
ACD 17						**$160**	$140	**$20**	14%
ACD 18						**$105**	$95	**$10**	11%
							*Avg. Diff.	$66	13%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE
ARKANSAS AGRICULTURAL STATISTICS
*Avg Diff. $ value and % does not use soil types without avg. bushel data

PASTURE

	AUM	AVG $ PER AUM	TOTAL	CAPITAL-IZATION RATE	ROUNDED TO NEAREST $5	OLD RATE ROUNDED TO THE NEAREST $5	DIFF	% DIFF
				8.88%				
ACD 1	9.8	$2.73	$26.75	$301.28	**$300**	**$290**	**$10**	3%
ACD 2	8	$2.73	$21.84	$245.95	**$245**	**$235**	**$10**	4%
ACD 3	6.1	$2.73	$16.65	$187.53	**$190**	**$180**	**$10**	6%
ACD 4	6.3	$2.73	$17.20	$193.68	**$195**	**$185**	**$10**	5%
ACD 5	6.6	$2.73	$18.02	$202.91	**$205**	**$195**	**$10**	5%
ACD 6	4.4	$2.73	$12.01	$135.27	**$135**	**$130**	**$5**	4%
ACD 7	6.5	$2.73	$17.75	$199.83	**$200**	**$190**	**$10**	5%
ACD 8	6.6	$2.73	$18.02	$202.91	**$205**	**$195**	**$10**	5%
ACD 9	4.2	$2.73	$11.47	$129.12	**$130**	**$125**	**$5**	4%
ACD 10	6.5	$2.73	$17.75	$199.83	**$200**	**$190**	**$10**	5%
ACD 11	3.1	$2.73	$8.46	$95.30	**$95**	**$90**	**$5**	6%
ACD 12	7.8	$2.73	$21.29	$239.80	**$240**	**$230**	**$10**	4%
ACD 13	6.6	$2.73	$18.02	$202.91	**$205**	**$195**	**$10**	5%
ACD 14	5.2	$2.73	$14.20	$159.86	**$160**	**$155**	**$5**	3%
ACD 15	4.4	$2.73	$12.01	$135.27	**$135**	**$130**	**$5**	4%
ACD 16	3.7	$2.73	$10.10	$113.75	**$115**	**$110**	**$5**	5%
ACD 17	3.7	$2.73	$10.10	$113.75	**$115**	**$110**	**$5**	5%
ACD 18					**$75**	**$75**	**$0**	0%
						Avg. Diff.	$8	5%

SOURCES:

NATURAL RESOURCES AND CONSERVATION SERVICE
ARKANSAS AGRICULTURAL STATISTICS

*Avg Diff. $ value and % does not use soil types without AUM data

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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total at Harvest
0	Prep./Plant	$ 171	No	$0	$171	$0	$1,711	$1,882
3	Spray	$ 60	Yes	$21	$39	$161	$300	$156
8	PCT	$ 86	Yes	$30	$56	$145	$270	$150
18	Fert.	$ 77	Yes	$27	$50	$44	$81	$61
26	Fert.		Yes	$0	$0	$0	$0	$0
Subtotal:		$394	-	$78	$316	$350	$2,362	$2,249
Annual Expenses:								
Adminstration/management.:		$10	Yes	$4	$7	$32	$60	$31
Subtotal (30 yrs.):		$300	"	$105	$195	$334	$619	$376
Total:		$694	-	$183	$511	$684	$2,981	$2,625

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
16	9.21	$19.55	$180	($13)	-		$167	-	-
	(Cords)				($63)	[1]	$104	$216	$320
23	3.78	$292.78	$1,108	($78)	-		$1,030	-	-
	(MBF Doyle)				($388)	[1]	$642	$482	$1,125
30	16.45	$292.78	$4,816	($337)	-		$4,479	-	-
	(MBF Doyle)				($1,547)	[1]	$2,931	$0	$2,931
Total:		-	$6,103	($427)	($1,998)		$3,678	$698	$4,376

[1] 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:	$4,376
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:	($2,625)
3. Net income before property tax:	$1,751

4. Present value of net income before property tax:		$175
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($1.62)
Annual property tax payment adjusted for fed. inc. tax deduction:		($1.05)
Total property tax payments per harvest cycle:		($32)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$100
6. Land value after property tax (adj. for income tax deduction):		**$162**

Step 4 - Tax Burden on High Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$48	-	$32	$100	$132
Subtotal:		$48	-	$32	$100	$132
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$427	-	$278	-	$278
Federal Income Tax on harvest revenue @	35.0%	-	$1,998	$1,998	-	$1,998
Subtotal:		$427	$1,998	$2,276	-	$2,276
Totals:		$476	$1,998	$2,307	$100	$2,407
Tax burden as percent of gross revenues:		7.8%	32.7%	37.8%	1.6%	39.4%

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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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:								
Adminstration/management.:		$8	Yes	$3	$5	$31	$57	$29
Subtotal (32 yrs.):		$256	"	$90	$166	$328	$609	$358
Total:		$256	-	$90	$166	$328	$609	$358

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Income Tax@ 35%	Net Income After Tax	Accrued Interest on Net	Total Income
18	8.03	$19.55	$157	($11)	-	$146	-	-
	(Cords)				($55) [1]	$91	$188	$279
32	13.59	$292.78	$3,979	($279)	-	$3,701	-	-
	(MBF Doyle)				($1,393) [1]	$2,308	$0	$2,308
Total:		-	$4,136	($290)	($1,448)	$2,399	$188	$2,587

[1] 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:		$2,587
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		($358)
3. Net income before property tax:		$2,229
4. Present value of net income before property tax:		$187
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($1.73)
Annual property tax payment adjusted for fed. inc. tax deduction:		($1.12)
Total property tax payments per harvest cycle:		($36)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$132
6. Land value after property tax (adj. for income tax deduction):		**$173**

Step 4 - Tax Burden on Medium Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$55	-	$36	$132	$167
Subtotal:		$55	-	$36	$132	$167
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$290	-	$188	-	$188
Federal Income Tax on harvest revenue @	35.0%	-	$1,448	$1,448	-	$1,448
Subtotal:		$290	$1,448	$1,636	-	$1,636
Totals:		$345	$1,448	$1,672	$132	$1,803
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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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:								
Adminstration/management.:		$0	Yes	$0	$0	$0	$0	$0
Subtotal (34 yrs.):		$0	"	$0	$0	$0	$0	$0
Total:		$0	-	$0	$0	$0	$0	$0

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Income Tax@ 35%	Net Income After Tax	Accrued Interest on Net	Total Income
			$0	$0	-	$0	-	-
					$0	$0	$0	$0
34	11.16	$293	$3,267	($229)		$3,038	-	-
	(MBF Doyle)				($1,143) [1]	$1,895	$0	$1,895
Total:		-	$3,267	($229)	($1,143)	$1,895	$0	$1,895

[1] 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:		$1,895
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		$0
3. Net income before property tax:		$1,895
4. Present value of net income before property tax:		$134
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($1.24)
Annual property tax payment adjusted for fed. inc. tax deduction:		($0.80)
Total property tax payments per harvest cycle:		($27)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$115
6. Land value after property tax (adj. for income tax deduction):		**$124**

Step 4 - Tax Burden on Low Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$42	-	$27	$115	$142
Subtotal:		$42	-	$27	$115	$142
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$229	-	$149	-	$149
Federal Income Tax on harvest revenue @	35.0%	-	$1,143	$1,143	-	$1,143
Subtotal:		$229	$1,143	$1,292	-	$1,292
Totals:		$271	$1,143	$1,319	$115	$1,434
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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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 Expenses:								
Adminstration/management.:		$0	Yes	$0	$0	$0	$0	$0
Subtotal (40 yrs.):		$0	"	$0	$0	$0	$0	$0
Total:		$0	-	$0	$0	$0	$0	$0

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
40	3.42	$ 18	$63	($4)	-		$58	-	-
	(Cords)				($22)		$36	$0	$36
40	9.78	$ 231	$2,259	($158)	-		$2,101	-	-
	(MBF Doyle)				($791)	1	$1,310	$0	$1,310
Total:		-	$2,322	($163)	($813)		$1,346	$0	$1,346

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$1,346
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		$0
3. Net income before property tax:		$1,346
4. Present value of net income before property tax:		$57
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($0.53)
Annual property tax payment adjusted for fed. inc. tax deduction:		($0.34)
Total property tax payments per harvest cycle:		($14)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$87
6. Land value after property tax (adj. for income tax deduction):		**$53**

Step 4 - Tax Burden on MIXED HARDWOOD Site Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$21	-	$14	$87	$101
Subtotal:		$21	-	$14	$87	$101
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$163	-	$106	-	$106
Federal Income Tax on harvest revenue @	35.0%	-	$813	$813	-	$813
Subtotal:		$163	$813	$918	-	$918
Totals:		$184	$813	$932	$87	$1,019
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

TIMBER

OZARK REGION:

Cap Rate= **8.00%**

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	$50	$50	0%
2	$155	$145	-6%
3	$135	$130	-4%
4	$120	$115	-4%
5	$70	$70	0%
6	$140	$135	-4%
7	$65	$65	0%
8	$105	$100	-5%
9	$130	$125	-4%
10	$70	$70	0%
11	$125	$125	0%
12	$160	$155	-3%
13	$155	$150	-3%
14	$140	$135	-4%
15	$135	$130	-4%
16	$135	$130	-4%
17	$70	$70	0%
18	$65	$65	0%
			-3%

DCF's Harvest Volume by Region

Ozark Region DCF Classification	Type of Harvest	Age @ Harvest	Species	Product Classific.	Yield/yr	Units	Total Vol. @ Harvest	Percent Harvested	Harvest Volume
Marginal Pine Site	Final Hvst	34	Pine	Sawtimber	1.15	cds	39.1	100.0%	11.16
Medium Pine Site	C. Thinning	18	Pine	Pulpwood	1.49	cds	26.8	30.0%	8.03
Medium Pine Site	Final Hvst	32	Pine	Sawtimber	1.49	cds	47.6	100.0%	13.59
High Pine Site	C. Thinning	16	Pine	Pulpwood	1.92	cds	30.7	30.0%	9.21
High Pine Site	C. Thinning	23	Pine	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 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
					9.88%				
ACD 1	36	$9.12	$328.32	$82.08	$830.77	**$830**	$730	**$100**	14%
ACD 2	31	$9.12	$282.72	$70.68	$715.38	**$715**	$630	**$85**	13%
ACD 3	20	$9.12	$182.40	$45.60	$461.54	**$460**	$405	**$55**	14%
ACD 4	27	$9.12	$246.24	$61.56	$623.08	**$625**	$550	**$75**	14%
ACD 5	20	$9.12	$182.40	$45.60	$461.54	**$460**	$405	**$55**	14%
ACD 6	15	$9.12	$136.80	$34.20	$346.15	**$345**	$305	**$40**	13%
ACD 7	29	$9.12	$264.48	$66.12	$669.23	**$670**	$590	**$80**	14%
ACD 8	29	$9.12	$264.48	$66.12	$669.23	**$670**	$590	**$80**	14%
ACD 9	15	$9.12	$136.80	$34.20	$346.15	**$345**	$305	**$40**	13%
ACD 10	29	$9.12	$264.48	$66.12	$669.23	**$670**	$590	**$80**	14%
ACD 11	15	$9.12	$136.80	$34.20	$346.15	**$345**	$305	**$40**	13%
ACD 12	27	$9.12	$246.24	$61.56	$623.08	**$625**	$550	**$75**	14%
ACD 13	21	$9.12	$191.52	$47.88	$484.62	**$485**	$425	**$60**	14%
ACD 14	21	$9.12	$191.52	$47.88	$484.62	**$485**	$425	**$60**	14%
ACD 15						**$260**	$230	**$30**	13%
ACD 16						**$210**	$185	**$25**	14%
ACD 17						**$160**	$140	**$20**	14%
ACD 18						**$105**	$95	**$10**	11%
							Avg. Diff.	$66	14%

SOURCES:

NATURAL RESOURCE CONSERVATION SERVICE

ARKANSAS AGRICULTURAL STATISTICS

*Avg Diff. $ value and % does not use soil types without avg. bushel data

ASSESSMENT COORDINATION DEPARTMENT

SOUTHWEST

PASTURE

	AUM	AVG $ PER AUM	TOTAL	APPLIED CAPITAL-IZATION RATE	ROUNDED TO NEAREST $5	OLD RATE ROUNDED TO THE NEAREST $5	DIFF	% DIFF
				8.88%				
ACD 1	9.1	$2.73	$24.84	$279.76	**$280**	$270	**$10**	4%
ACD 2	8.1	$2.73	$22.11	$249.02	**$250**	$240	**$10**	4%
ACD 3	6.1	$2.73	$16.65	$187.53	**$190**	$180	**$10**	6%
ACD 4	7.2	$2.73	$19.66	$221.35	**$220**	$215	**$5**	2%
ACD 5	5.2	$2.73	$14.20	$159.86	**$160**	$155	**$5**	3%
ACD 6	5.2	$2.73	$14.20	$159.86	**$160**	$155	**$5**	3%
ACD 7	6.8	$2.73	$18.56	$209.05	**$210**	$200	**$10**	5%
ACD 8	5.5	$2.73	$15.02	$169.09	**$170**	$165	**$5**	3%
ACD 9	4	$2.73	$10.92	$122.97	**$125**	$120	**$5**	4%
ACD 10	5	$2.73	$13.65	$153.72	**$155**	$150	**$5**	3%
ACD 11	4.5	$2.73	$12.29	$138.34	**$140**	$135	**$5**	4%
ACD 12	7.9	$2.73	$21.57	$242.87	**$245**	$235	**$10**	4%
ACD 13	7.2	$2.73	$19.66	$221.35	**$220**	$215	**$5**	2%
ACD 14	6	$2.73	$16.38	$184.46	**$185**	$175	**$10**	6%
ACD 15	4.8	$2.73	$13.10	$147.57	**$145**	$145	**$0**	0%
ACD 16	3	$2.73	$8.19	$92.23	**$90**	$90	**$0**	0%
ACD 17	3	$2.73	$8.19	$92.23	**$90**	$90	**$0**	0%
ACD 18					**$75**	$75	**$0**	0%
						Avg. Diff.	$6	3%

SOURCES:

NATURAL RESOURCES CONSERVATION SERVICE

ARKANSAS AGRICULTURAL STATISTICS

*Avg Diff. $ value and % does not use soil types without AUM data

ASSESSMENT COORDINATION DEPARTMENT

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

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

Out-of-Pocket Expenses:

Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total at Harvest
0	Prep./Plant	$ 171	No	$0	$171	$0	$1,711	$1,882
3	Spray	$ 60	Yes	$21	$39	$161	$300	$156
8	PCT	$ 86	Yes	$30	$56	$145	$270	$150
18	Fert.	$ 77	Yes	$27	$50	$44	$81	$61
26	Fert.		Yes	$0	$0	$0	$0	$0
Subtotal:		$394	-	$78	$316	$350	$2,362	$2,249
Annual Expenses:								
Adminstration/management.:		$10	Yes	$4	$7	$32	$60	$31
Subtotal (30 yrs.):		$300	"	$105	$195	$334	$619	$376
Total:		$694	-	$183	$511	$684	$2,981	$2,625

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
16	9.21	$ 24	$220	($15)	-		$205	-	-
	(Cords)				($77)	[1]	$128	$263	$391
23	3.78	$ 356	$1,349	($94)	-		$1,254	-	-
	(MBF Doyle)				($472)	[1]	$782	$587	$1,369
30	16.45	$ 356	$5,863	($410)	-		$5,453	-	-
	(MBF Doyle)				($1,914)	[1]	$3,539	$0	$3,539
Total:		-	$7,432	($520)	($2,463)		$3,666	$851	$5,299

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

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$5,299
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		($2,625)
3. Net income before property tax:		$2,674
4. Present value of net income before property tax:		$267
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($2.47)
Annual property tax payment adjusted for fed. inc. tax deduction:		($1.60)
Total property tax payments per harvest cycle:		($48)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$153
6. Land value after property tax (adj. for income tax deduction):		**$247**

Step 4 - Tax Burden on High Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$74	-	$48	$153	$201
Subtotal:		$74	-	$48	$153	$201
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$520	-	$338	-	$338
Federal Income Tax on harvest revenue @	35.0%	-	$2,463	$2,463	-	$2,463
Subtotal:		$520	$2,463	$2,801	-	$2,801
Totals:		$594	$2,463	$2,849	$153	$3,002
Tax burden as percent of gross revenues:		8.0%	33.1%	38.3%	2.1%	40.4%

SOUTHWEST
PINEMEDSITE

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

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

Out-of-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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 Expenses:								
Adminstration/management.:		$8	Yes	$3	$5	$31	$57	$29
Subtotal (32 yrs.):		$256	"	$90	$166	$328	$609	$358
Total:		$256	-	$90	$166	$328	$609	$358

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
18	8.03	$23.88	$192	($13)	-		$178	-	-
	(Cords)				($67)	[1]	$111	$230	$341
32	13.59	$356.48	$4,845	($339)	-		$4,506	-	-
	(MBF Doyle)				($1,696)	[1]	$2,810	$0	$2,810
Total:		-	$5,037	($353)	($1,763)		$2,921	$230	$3,151

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

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$3,151
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		($358)
3. Net income before property tax:		$2,793
4. Present value of net income before property tax:		$234
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($2.16)
Annual property tax payment adjusted for fed. inc. tax deduction:		($1.41)
Total property tax payments per harvest cycle:		($45)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$165
6. Land value after property tax (adj. for income tax deduction):		**$216**

Step 4 - Tax Burden on Medium Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$69	-	$45	$165	$210
Subtotal:		$69	-	$45	$165	$210
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$353	-	$229	-	$229
Federal Income Tax on harvest revenue @	35.0%	-	$1,763	$1,763	-	$1,763
Subtotal:		$353	$1,763	$1,992	-	$1,992
Totals:		$422	$1,763	$2,037	$165	$2,202
Tax burden as percent of gross revenues:		8.4%	35.0%	40.4%	3.3%	43.7%

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-Pocket Expenses:

Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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:								
Adminstration/management.:		$0	Yes	$0	$0	$0	$0	$0
Subtotal (34 yrs.):		$0	"	$0	$0	$0	$0	$0
Total:		$0	-	$0	$0	$0	$0	$0

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
		$24	$0	$0	-		$0	-	-
	(Cords)				$0		$0	$0	$0
34	11.16	$356	$3,978	($278)			$3,699	-	-
	(MBF Doyle)				($1,392)	1	$2,307	$0	$2,307
Total:		-	$3,978	($278)	($1,392)		$2,307	$0	$2,307

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$2,307
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		$0
3. Net income before property tax:		$2,307
4. Present value of net income before property tax:		$163
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($1.50)
Annual property tax payment adjusted for fed. inc. tax deduction:		($0.98)
Total property tax payments per harvest cycle:		($33)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$140
6. Land value after property tax (adj. for income tax deduction):		**$150**

Step 4 - Tax Burden on Low Site Pine Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$51	-	$33	$140	$173
Subtotal:		$51	-	$33	$140	$173
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$278	-	$181	-	$181
Federal Income Tax on harvest revenue @	35.0%	-	$1,392	$1,392	-	$1,392
Subtotal:		$278	$1,392	$1,573	-	$1,573
Totals:		$330	$1,392	$1,606	$140	$1,747
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-Pocket Expenses: Age	Activity	Expense	Fed. Tax Deductible	Fed. Tax Benefit	Net Expense excl. Taxes	Accrued Interest on Fed. Benefit	Accrued Interest on Net Out.	Acc. Total 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 Expenses:								
Adminstration/management.:		$0	Yes	$0	$0	$0	$0	$0
Subtotal (40 yrs.):		$0	"	$0	$0	$0	$0	$0
Total:		$0	-	$0	$0	$0	$0	$0

**Interest rate used in computations is: 8.00%

Step. 2 - Revenues and Federal and State Tax Treatment

Stand Age	Harvest Volume	Stumpage Price	Harvest Revenue	State and Federal Tax Payments: Arkansas State Income Tax@ 7%	Fed. Income Tax @ 35%		Net Income After Tax	Accrued Interest on Net	Total Income
40	3.42	$ 32	$110	($8)	-		$102	-	-
	(Cords)				($38)		$64	$0	$64
40	9.78	$ 273	$2,668	($187)	-		$2,481	-	-
	(MBF Doyle)				($934)	1	$1,548	$0	$1,548
Total:		-	$2,778	($194)	($972)		$1,611	$0	$1,611

Step 3 - Estimated Timberland Value per Acre

1. Total Income including accrued interest on net thinning income to final harvest:		$1,611
2. Out-of-pocket expenses (silvicultural activities and taxes) and accrued interest:		$0
3. Net income before property tax:		$1,611
4. Present value of net income before property tax:		$68
5. Annual ad valorem property taxes:		
Property tax rate:	50 mills @ 20% assessment ratio	1.00%
Annual property tax payment:		($0.63)
Annual property tax payment adjusted for fed. inc. tax deduction:		($0.41)
Total property tax payments per harvest cycle:		($16)
Accrued interest on out-of-pocket tax payments per harvest cycle:		$105
6. Land value after property tax (adj. for income tax deduction):		**$63**

Step 4 - Tax Burden on HARDWOOD Site Forest Land

		Total Tax Payments:		Out-of-Pocket Expenses		
		State	Federal	Taxes	Accrued Interest	Total
Cost-increasing:						
Property taxes on land:		$25	-	$16	$105	$121
Subtotal:		$25	-	$16	$105	$121
Revenue-reducing:						
Arkansas State Income Tax on harvest revenue @	7.0%	$194	-	$126	-	$126
Federal Income Tax on harvest revenue @	35.0%	-	$972	$972	-	$972
Subtotal:		$194	$972	$1,099	-	$1,099
Totals:		$220	$972	$1,115	$105	$1,220
Tax burden as percent of gross revenues:		7.9%	35.0%	40.1%	3.8%	43.9%

SOUTHWEST REGION TIMBER:

Cap Rate= 8.00%

ACD#	Previous Value/Acre	Current Value/Acre	Var/Ac
1	$90	$90	0%
2	$190	$180	-5%
3	$225	$215	-4%
4	$215	$200	-7%
5	$100	$95	-5%
6	$225	$215	-4%
7	$220	$205	-7%
8	$65	$65	0%
9	$170	$165	-3%
10	$60	$65	8%
11	$160	$155	-3%
12	$215	$210	-2%
13	$225	$220	-2%
14	$215	$210	-2%
15	$200	$190	-5%
16	$190	$185	-3%
17	$100	$95	-5%
18	$80	$75	-6%
			-3%

DCF's Harvest Volume by Region

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

CROP AND PASTURE RATES

Crop

Rental Rate Multiplier
25.00%

9.88%
Crop Cap Rate Multiplier

soybean prices

2003	7.11	
2004	5.88	
2005	5.92	
2006	6.41	
2007	9.02	
2008	9.64	
2009	9.66	
2010	10.9	
2011	12.3	
2012	14.4	
	$9.12	10 yr
	$11.38	last 5 yr
	$12.53	last 3 yr

Soybean average price multiplier
$9.12

Pasture

Pasture Cap Rate Multiplier
8.88%

	Delta States	LA	MS	Averge	Reported
2003		15	16	15.5	
2004		15.5	16.5	16	
2005		16.5	16.5	16.5	
2006		19	16	17.5	
2007		23	18	20.5	
2008		27	18.5	22.75	21.5
2009**	na	na		19	19
2010	na	na		16	16
2011	na	na		16	16
2012				18	18

STATE AVERAGE AUM		PASTURE RENT	
7.7	DELTA	15.5	2003
5.3	OUACHITA	16	2004
6	OZARK	16.5	2005
6.8	SOUTHWEST	17.5	2006
6.5	**AVERAGE**	20.5	2007
		21	2008
		19	2009
		16	2010
		16	2011
		18	2012
		17.6	10 yr average
		18	last 5 avg
		16.66667	last 3 avg

AVG AUM RENTAL VALUE PER ACRE
$2.73

$2.73

Capitalization Rate

	Crop	**Pasture**
Safe Rate 10 Year Average of the 30 Year T-Bond	4.38%	4.38%
Industry Risk Rate	3.50%	3.50%
Management Rate	2.00%	1.00%
Capitalization Rate	9.88%	8.88%
	9.88%	**8.88%**

Timber Mart-South Stumpage Price Data

YEAR	Doyle Pine Sawtimber		Doyle Oak Sawtimber		Doyle Mixed Hardwood		Average Hardwood		Standard Cord Pine Pulpwood		Standard Cord Hardwood Pulpwood	
	Reg. 1	**Reg. 2**	**Reg. 1**	**Reg. 2**	**Reg. 1**	**Reg. 2**	**Reg. 1**	**Reg. 2**	**Reg. 1**	**Reg. 2**	**Reg. 1**	**Reg. 2**
2003	$ 357.74	$ 332.95	$ 350.82	$ 334.75	$153.75	$ 164.88	$ 252.28	$ 249.82	$ 15.47	$ 13.12	$ 17.26	$ 13.96
2004	$ 403.94	$ 339.47	$ 373.75	$ 331.41	$163.19	$ 155.31	$ 268.47	$ 243.36	$ 16.77	$ 12.40	$ 19.23	$ 10.69
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
10 YEAR AVG	$ 356.48	$ 292.78	$ 322.10	$ 279.71	$ 223.68	$ 182.28	$ 272.89	$ 231.00	$ 23.88	$ 19.55	$ 32.09	$ 18.37

NOTES:

FORESTRY RELATED COSTS

Forestry Costs:	2004	2006	2008	2010	2012	5 Year Average
Planting by Hand	0.0668	0.0863	0.1079	0.1187	0.1144	
Planting by Machine	0.1116	0.1168	0.1386	0.1469	0.2411	
Avg	0.0892	0.10155	0.12325	0.1328	0.17775	
Cost for 604 tree/ac	$ 53.88	$ 61.34	$ 74.44	$ 80.21	$ 107.36	
Site Prep (a)	$ 72.59	$ 82.61	$ 108.55	$ 96.57	$ 116.01	
Total Establishment (c)(d)	$ 126.46	$ 143.94	$ 182.99	$ 176.78	$ 223.37	$ 170.71
Spraying	$ 69.45	$ 79.41	$ 48.82	$ 47.68	$ 55.12	$ 60.10
PCT	$ 74.98	$ 58.89	$ 80.18	$ 166.66	$ 50.27	$ 86.20
Fertilization	$ 50.08	$ 77.98	$ 110.28	$ 62.79	$ 86.33	$ 77.49
						$394

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

Timber Growth/Yield Information

Pine Yields (1/3)

********** Site Index **********

Marg. Site		Med Site			High Site	
65	70	80	80	85	90	95

Average Annual Growth (std. cords)

1.15	1.26	1.36	1.49	1.62	1.77	1.92

Hardwood Yields (2/3):

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

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