



Forest Management Guide for Arkansas's Forest Landowners



Arkansas Forestry Commission Publication
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Compiled by Arkansas Forestry Commission

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CONTENTS

Management Plan	1
Components of a Management Plan	3
Assessment or Inventory	3
Map	4
Recommendations	4
Best Management Practices.....	5
Making Money from Your Forest.....	6
Forest Regeneration.....	7
Pine Regeneration	7
Natural	7
Artificial	8
Hardwood Regeneration	10
Natural	10
Artificial	11
How to Buy Seedlings from AFC.....	11
Harvesting	12
Intermediate Treatments.....	14
Financial Assistance	17
Cost-share Summary for Forestry Practices	19
Managing for Multiple Use.....	21
Wildlife	21
Agroforestry	21
Recreation.....	22
Aesthetics	22
Forestry Tax Considerations.....	23
Get Professional Help.....	24
Arkansas Forestry Commission Districts.....	24
AGFC Private Lands Biologist Districts	25
Quick Links for Helpful Information.....	25
County Level Agency Contact Index.....	27
Additional State and Federal Resource Contacts.....	37
Appendix A: Sample Timber Contract.....	38

Tables

Per Acre Revenue during Loblolly Pine Rotation	6
Common Pine Seedling Spacings	9
Common Hardwood Seedling Spacings	11
Prescribed Fire Recommendations.....	15
Cost Share Programs Summary	19
Water Bar Spacings Table.....	44
Recommended Seed Mixtures and Fertilizing Rates for Roads, Log Landings, Fills and other Disturbed Areas	45

INTRODUCTION

This publication outlines management options the non-industrial, private landowners of Arkansas may use to meet their management objectives while conserving natural resources. Non-industrial private landowners own 59% of the forests in Arkansas. Management decisions made by landowners have long-term environmental and economic impacts on Arkansas. Healthy forests provide wood products, wildlife habitat, clean air, clean water, and recreational opportunities. This landowner's guide is a useful resource to improve the management, health, and ultimately, the economic value of the forests in Arkansas.

MANAGEMENT PLAN

Careful, thoughtful planning is the first and most important step in managing a forest. A forest management plan identifies the landowner's objectives and recommends procedures to allow the landowner to fulfill his or her objectives.

Technical assistance is available to help private landowners with their forest management planning at no cost. State and federal agencies are available to meet these needs. Contact the local AFC office to get a forester to inspect your property. A site-specific plan can then be written, based on your management objectives.

As a landowner, your management objectives are important and unique. Objectives may address sustained periodic income, wildlife habitat, promoting aesthetics and recreational opportunities, or an integration of all these and more according to your land management goals.

Management objectives should be compatible with the potential of the landowner's property. Additionally, a forest management plan containing landowner objectives should be flexible enough to respond to any changes in the landowner's goals.

The Tree Farm System and the Forest Stewardship Program provide forest management plan development assistance and recognition for forest landowners who improve their forests by implementing the recommendations of the forest management plan. Both Tree Farm and Forest Stewardship management plans ad-



Tree farmers provide renewable forest resources.

dress a broad range of natural resource management goals. A Forest Stewardship management plan may also include the input of a wildlife biologist, a soil scientist, and other professionals as necessary. Landowners receive special property signs to recognize their forest management efforts. All forest landowners should contact a registered, professional forester for forest management plan development assistance.



After completing the Forest Stewardship Program, you will be given an identifying property sign.

Academically trained in the management of forests, registered foresters provide guidance to ensure the forests are managed for the landowner's desired objectives and goals while providing a safeguard against improper practices. Consulting foresters, contracted for a fee, can manage specific activities, oversee the detailed management of property, and administer timber sales. Consultant forester fees are often made back in the additional income a landowner receives from a timber sale.

Arkansas law mandates that all foresters making management recommendations to landowners must register with the state.

Landowners should ask for qualifications, references, and proof of registration before working with a forester. It is also beneficial to obtain a personal referral from another landowner. To see a list of consulting foresters in Arkansas, direct your web browser to www.forestry.state.ar.us/manage/consultantforesters.html.

Additionally, many forest product companies employ professional foresters to assist private landowners. Some offer Landowner Assistance Programs (LAP) to help landowners. Technical assistance can also be received from the local Farm Service Agency (FSA), Natural Resource Conservation Service (NRCS), Arkansas Game and Fish Commission (AGFC), United States Fish and Wildlife Service (USFWS), and the University of Arkansas Cooperative Extension Service (UACES).

Please see the index beginning on page 27 for the websites and county contacts of these agencies. There is a wealth of information available for you, the private landowner, simply for the asking.



AFC foresters and rangers work with you to help you reach your forest management objectives.

COMPONENTS OF A MANAGEMENT PLAN

Assessment or Inventory

A resource assessment is generally the first step in creating a management plan. A resource assessment can take many forms. It may describe timber resources, non-timber resources such as wildlife, soil, water bodies, or past disturbances such as previous harvests and fires.

A resource assessment is needed to evaluate the potential for achieving the landowner's goals. It will also be used as a basis for developing specific management strategies.

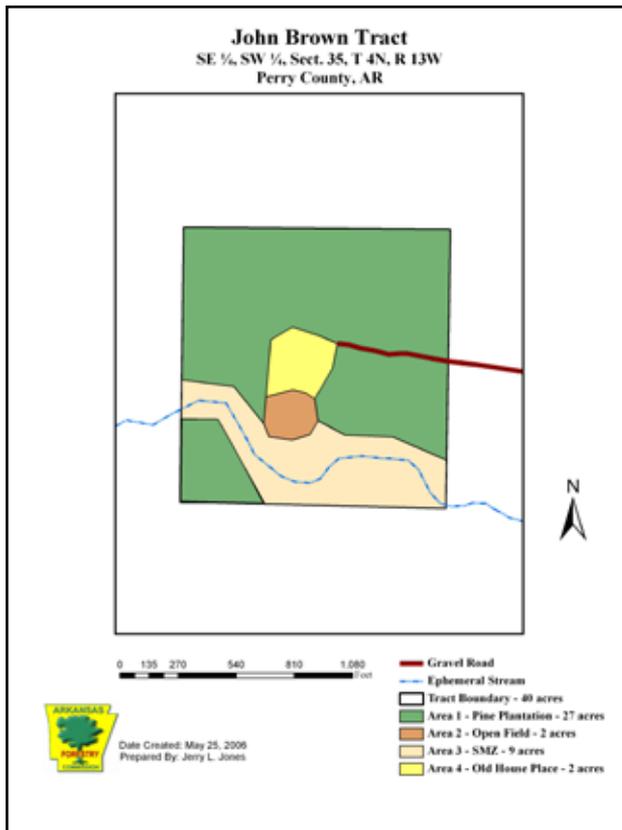
The resource assessment should be included in a written management plan. The timber resources portion of the written management plan may be the most detailed part of the plan.

This description may include the amount, sometimes referred to as volume of wood in the forest, as well as the condition or health of the forest.

Map

The management plan should also include a map of resources. The map may divide the resources into logical groupings called areas or stands. For example, part of the forest may contain only shortleaf pine while an adjacent area may contain an open field. Most likely, these two parts of the forest would be divided into two different areas on the map as shown on the sample map for the John Brown Tract.

Additional maps made from aerial photos and/or topography may also be included.



Recommendations

The management plan includes recommendations based on the landowner's objectives and the potential of the land as found in the resource assessment. Recommendations may be made for each specific stand. The recommendations should integrate all landowner objectives for each stand.

For example, if a landowner is interested primarily in turkey management and secondarily in income from timber, any timber harvesting recommendations should consider the consequences to turkey habitat. Recommendations may include tree planting, harvesting, prescribed burning, herbicide treatments, fire lane construction, best management practices to protect water quality, forest stand improvement, pre-commercial thinning, wildlife habitat improvements, or any combination of these.



Streamside Management Zones protect water quality and provide wildlife habitat.

BEST MANAGEMENT PRACTICES

Forestry Best Management Practices (BMPs) are important practices designed to protect water quality from impairment that can result from soil erosion and introduction of woody debris into streams from harvesting and site preparation activities.

BMPs need to be a part of all forestry operations. A good start is to include site-specific BMPs in a written management plan made before the start of forestry operations.

BMP practices are varied and can include both structural and non-structural controls, operations, or maintenance procedures applied before, during, or after forest operations.

Examples of structural controls are concrete low water fords, portable bridges, and culverts. Examples of operations that implement BMPs include soil stabilization by planting grass seed (artificial revegetation); keeping “row” type site preparation activities such as windrowing or ripping on contours; leaving buffer strips of timber adjacent to stream channels (called Streamside Management Zones or SMZs); or implementing road drainage techniques such as road crowning and sloping to control water flow.

An example of maintenance procedures that can help prevent erosion is the timely checking and repairing of road-way water control mechanisms such as culverts and wing ditches. Road surfaces must perform correctly and be kept in repair.

A management plan that includes BMP implementation recommendations that are specific to your site and forest operation will help ensure that non-point source pollution control activities of the operation meet voluntary guidelines.



Best Management Practices keep Arkansas’s rivers and streams clear of debris.

BMP guidelines are extensive,

varied, and some can be technical in design and application. When planning your forest operation, be sure and request the AFC publication “Best Management Practices for Water Quality Protection” available at all AFC offices (see the index on page 27 for addresses and numbers) or on the AFC web page.

MAKING MONEY FROM YOUR FOREST

Landowners must know the value and potential value of their forestland. Stands of low quality and value may never grow into a stand of high value. A fresh start is needed for such stands.

By thinning the right way, when it is the proper time to thin, stands remain healthy and vigorous, help wildlife, and set the stage to provide higher value sawtimber compared to lower value pulpwood.

Table 1: Per acre revenue during loblolly pine rotation

Activity	Pulpwood Value	Chip-N-Saw Value	Sawtimber Value	Totals
1st Thinning	\$168.27			\$168.27
2nd Thinning	\$183.89	\$603.95		\$787.84
Final Harvest	\$161.77	\$889.22	\$1,932.00	\$2,982.99
Totals	\$513.93	\$1,493.17	\$1,932.00	\$3,939.10

Get professional advice to determine the potential of forest stands. The AFC's website has a forestry vendor's list to help landowners find businesses that provide forestry services (see page 25 for a link to this page).

The following example represents returns per acre for an average loblolly plantation. Values presented will vary depending on site quality and practices implemented.

FOREST REGENERATION

A landowner needs to plan for regeneration before harvest. The type of harvest and regeneration method will be determined, at least partially, by management objectives and the desired species.

Two basic regeneration alternatives are open to landowners. The first alternative is to manage for natural regeneration through planned cultural practices. Second, a complete harvest may be desired, which must be followed by planting seedlings, also called artificial regeneration.

Natural Regeneration of Pine

Natural regeneration involves more than simply letting nature take its course. Forests must be carefully managed for effective natural regeneration. If this is not done, the time lag between harvest and the establishment of a new crop of trees could mean economic disaster.

Excessive numbers of seedlings could require expensive pre-commercial thinning, wiping out any savings in planting costs. A scarcity of new tree seedlings could under-utilize the site, robbing the owner of potential returns from the land. Effective natural reforestation is seldom free. It does not just happen.

Advantages and Disadvantages of Naturally Regenerating Pine

When compared to clear-cutting and planting, natural regeneration has advantages and disadvantages.

The advantages include:

- Lower establishment cost
- Less labor and heavy equipment required
- No problem with geographical origin of seed
- Uneven aged selection management more practical with this system
- Less immediate visual impact
- Less soil movement

The disadvantages include:

- Less control over spacing and initial stocking
- Longer rotations needed

- Risk of seed tree loss
- Generally lower yields
- No use of genetically improved stock
- Poor access for fire equipment
- Loss of one year or more of growth because of failure to regenerate promptly
- Need for pre-commercial thinning in many stands to obtain good growth



Machine planting pine seedlings.

Planting Pine

Most of the successful re-generation of loblolly and shortleaf pine is accomplished by planting seedlings. Planting, however, is not without its pitfalls.

Success depends on five crucial steps:

- Obtain professional advice for local conditions.
- Choose the right species and the best-adapted geographic seed source. Seedlings bought in one state may not grow best in another state.
- Plant good quality seedlings of the highest genetic gain possible. Discard small, weak seedlings.
- Protect seedlings from excessive heat and loss of moisture while in storage and through all steps in planting.

Plant trees in a proper manner. Refer to the AFC's publication "Guidelines for Seedling Care and Planting" on AFC's website.

Following these recognized guidelines is important to the land manager, professional forester, vendor, or any landowner who plans to invest in tree planting. Remember, it is much better to plan, plant and succeed, than it is to plant and fail. AFC also sells seedlings; see page 12 for more information about how to buy seedlings.

Site Preparation

Site preparation, or preparing the land for planting, is often a part of regeneration recommendations. In some cases, it is necessary to reduce or eliminate

competing vegetation before planting. Weigh the initial costs of treatment against future returns. When a treatment is too intensive, it may be uneconomical, even though an increased volume of wood results. Additionally, too intensive a treatment may actually decrease site productivity.



Aerial herbicide application

On drought prone soils with limited organic material, intensive site preparation may increase survival at the cost of later growth. Ideally, site preparation reduces competition without removing or destroying top soil and organic matter. Site preparation needs are often site specific.

Management plans should contain site preparation recommendations specific to your land.

Planting Time

For conventional bare root seedlings, the most favorable time to plant is during the dormant season. In Arkansas, the typical bare root planting season is from January 1 though April 1. Avoid planting when the ground is hard - either frozen or dry - or when too wet. Planting when the soil is in poor condition will result in low survival, poor planting production, misplanted seedlings, and poor growth.

Spacing

Before ordering seedlings, decide what spacing to use. No standard spacing can be recommended because of differences in site quality, local survival pattern, products desired, and other factors. Generally, the spacings in the following table are used in Arkansas for pine seedlings.

Table 2: Common Pine Seedling Spacings

Dimensions	Trees per Acre
7' x 10'	622
6' x 12'	605
8' x 10'	545
7' x 12'	519
9' x 10'	484
8' x 12'	454
10' x 10'	436

Usually, planting more seedlings per acre will require earlier thinning with trees being smaller (pulpwood) when thinned. Planting fewer trees per acre allows thinning to be delayed and trees to be larger. No matter what spacing is used, it is imperative thinning is done at the proper time to maintain the health and vigor of the stand.

The current trend in Arkansas is to plant pine at a wider spacing than was common just a few years ago. Spacing and quantity of seedlings needed should be addressed in a written management plan.

Natural Regeneration of Hardwoods

Planning for regeneration must occur before any harvest takes place. The method of regeneration will be determined, at least partially, by the species desired, species present and by the type of harvest that has taken place. The advantages and disadvantages of hardwood natural regeneration are very similar to pine natural regeneration (see “Advantages and Disadvantages of Natural Regenerating Pine” on page 7).

On many hardwood sites, natural regeneration may be sufficient to replenish the stand. A professional forester should examine the stand before the harvest to assess the regeneration potential of the stand.



Natural regeneration replenishes hardwood stands.

When naturally regenerating heavy-seeded species, such as the oaks, well-established seedlings should be in the understory at the time of harvest. These seedlings are called advanced regeneration. Their top growth may be very slow, but the root system continues to develop.

Young hardwood stands usually contain some stump sprouts, and occasionally entire stands can develop from stump sprouts. Because of their vigorous early growth, stump sprouts often dominate other forms of regeneration.

Advanced regeneration is particularly important for oaks because new seedlings are produced sporadically, and grow too slowly to compete successfully with other species. Oak saplings, 4 to 5 feet in height, with well-developed root systems are most desirable for use in advance regeneration.

Planting Hardwoods

Many of the same principles used when planting pine also apply to hardwood planting. Site preparation and seedling spacing are two possible exceptions. Usually it takes fewer hardwood seedlings than it does pine to regenerate a site.

Table 3: Common Hardwood Seedling Spacings

Dimensions	Trees per Acre
10' x 10'	436
10' x 12'	363
12' x 12'	303
15' x 15'	194

Some of the common hardwood spacings are listed in the following table.

Four important points to remember when planting hardwoods are:

- When selecting the planting site, make sure the species is suited to the site. Hardwoods adapted to dry sites will not live in wet areas.
- Plant only large, healthy seedlings with an adequate root/top ratio.
- Be prepared to control competing plants until your tree seedlings are well established and free to grow.
- Planting hardwoods works best in cropland or fields. It is very difficult to establish hardwood seedlings in cut over areas.

How to Buy Seedlings

Both pine and hardwood seedlings can be purchased from the AFC starting in July until supplies run out. Orders can be made on-line at www.forestry.state.ar.us/seedlingsales.html or by mailing seedling orders to the AFC at 3821 West Roosevelt Rd., Little Rock, AR 72204, phone-501-296-1940.



Arkansas Forestry Commission's Baucum Nursery grows both pine and hardwood seedlings.



Hire a professional logger to harvest your timber

HARVESTING

Never harvest before planning for forest regeneration. Landowners have many more options before trees are cut. Remember, it takes a long time to heal mistakes made at the time of harvest. Any harvest should move the stand toward the landowner's objectives as outlined in the management plan. Some simple rules to follow when harvesting are listed on the following pages.

Use a Registered Forester – Plan every harvest with the guidance of a registered professional forester. Landowners who enlist a professional forester's assistance receive higher returns in timber revenue, environmental protection, and landowner satisfaction with the harvest. Consulting foresters market timber for the best price. Landowners wishing to sell their own timber should plan to market the timber by taking bids from as many timber buyers as possible. A list of timber buyers is available on AFC's web site at: www.forestry.state.ar.us/manage/timber_buyer.html.

Select a Professional Logger – A trained professional logger can ensure effective use of the trees harvested and implementation of AFC's recommended Forestry Best Management Practices. Take time to know the prospective logger by asking for references, business experience, and professional training. A logger trained by the Arkansas Timber Producers Association is called an "ARK PRO Logger."

Have a Contract – A sample contract is on page 38. Require a pre-harvest conference to make sure the logger understands the harvesting contract and the landowner's objectives. It is imperative to make sure all property boundaries are

clearly marked before the harvest. Specific concerns of the landowner should be addressed in the contract. Contracts protect both the landowner and the timber buyer by insuring both parties understand the conditions of the sale.

Know What You Are Selling – A landowner should know an approximate value of their timber. Homeowners generally do not sell their homes before getting an appraisal. Neither should a timber owner sell trees before knowing their approximate value. Consulting foresters may be able to appraise timber. A consulting forester can identify the tree species, the volume of timber available, the best use of each tree, and the number of acres included in the harvest. Consulting foresters are able to market the timber to as many buyers as possible. This assures landowners get the best value for their timber. Pricing varies depending on species, access to the site, quality of the timber, available markets, haul distances, and other factors.

Understand the Tax Implications – It is important for landowners to understand the tax implications of a timber sale. Annual expenses involved in the maintenance of forests – including intermediate treatments - may have an impact on taxes.

Landowners should consult with an accountant and a forester for specific advice. Additional tax information is available from the AFC, Arkansas Cooperative Extension Service, and the Arkansas Forestry Association. A link to a tax handbook is available on the AFC website: www.forestry.state.ar.us/manage/Taxtips.pdf.



Forest stand improvement leaves desirable tree species and reduces overcrowding.

INTERMEDIATE TREATMENTS

Intensive management pays for the landowners who wish to have shorter rotations and earlier returns on their investment. A well-managed forest should be “tended” between regeneration and harvest. Trees must be kept healthy and vigorous to ward off insects and disease. Periodic thinning is necessary in all stands.

Site quality, species, age, density, and landowner objectives determine the interval between thinnings. Usually pine stands are thinned at 7 to 10 year intervals, while hardwood stands are thinned at 10 to 15 year intervals.

Tending to a forest during intermediate treatment times is often called Forest Stand Improvement (FSI), or Timber Stand Improvement (TSI).

Forest Stand Improvement can consist of several practices. Among these practices are prescribed burning, thinning, fertilizing and herbicide applications. Some of these practices may need to occur multiple times during the life of the forest stand.

Thinning can produce periodic income. Thinning is generally used to relieve overcrowding, adjust species composition, and increase the growth rate of crop trees. Generally, the trees to remove in a thinning are undesirable species, suppressed, forked, crooked, fire scared or with injuries from insects, diseases, wind,

Table 4: Prescribed Burning Recommendations

Purpose of Burn							
	Fuel Reduction	Pre Marking	Site Preparation		Range Improvement	Wildlife Habitat	Hardwood Control
			Natural	Artificial			
Time of Year	Nov-Mar	Sep - Mar	Aug - Oct	Anytime	Nov-Mar	Nov-Mar	Jul-Mar
Suggested Type of Fire	Backing or Strip Do not ring fire	Backing Do not ring fire	Backing, Strip, or Head Do not ring fire	Backing, Strip, or Head Do not ring fire	Backing	Backing	Backing, Strip, or Head Do not ring fire
Frequency	2 - 4 years				3 years	2 - 4 years	2 - 8 years
Temperature	32 - 70	32 - 80	60 - 80	32+	32 - 70	32 - 70	32 - 80
Wind Speed	3 - 10	3 - 10	2 - 10	2 - 10	3 - 10	3 - 10	3 - 10
Relative Humidity	30 - 50	30 - 50	30 - 50	30 - 50	30 - 50	30 - 50	30 - 50
Remarks	Be careful not to damage or kill desirable trees.	Be careful not to damage or kill desirable trees.	Be careful not to kill seed trees.	Smoke management is a must. Monitor for residual smoke movement.	Individual grasses respond differently to fire. Split range and burn 1/3 each year.	Avoid April - June nesting season. Leave unburned patches and thickets. Winter preferred for deer. This will promote sprouting.	Spring - summer burns result in higher kill of root stock and affect larger stems.

ice, or are too close to a desirable tree, and will not contribute to the net value of the stand. The quality and vigor of a stand should always be improved after a thinning operation.

Pre-commercial thinning is thinning that doesn't produce an income. Pre-commercial thinning is almost exclusively used to relieve overcrowding. Trees that should be left after thinning are high-quality, fast-growing, located so that all the available growing space is used efficiently, and may be most producing for wildlife. A well-managed forest stand may have periodic thinnings over many decades.

Prescribed burning, under the right conditions, can be used to reduce or eliminate undesirable vegetation. Prescribed burning can also reduce existing fuels and improve wildlife habitat. It may be possible to accomplish multiple objectives with a single prescribed burn.

Always consult with a forester or wildlife biologist about achieving specific goals through prescribed burning. Most landowners contract their prescribed burning needs.

The AFC and some forestry vendors offer this service to the landowner. To find a forestry vendor who can perform these and other intermediate treatments, please see the AFC website's list at www.forestry.state.ar.us/manage/vendors.html.

Always notify AFC Dispatch Center before starting a burn at 1-800-830-8015. Following is a table of recommendations to consider when planning a burn.

For those wishing to do their own burning, extreme care is needed. Those conducting the burn are responsible for damage caused by the burn.

Herbicide applications may be necessary to reduce the undesirable, competing vegetation in young forest stands. Using an herbicide application in this way is often called a release application. Release applications are usually made when seedlings are young to promote survival and growth. On some sites, a 'mid rotation' application is beneficial.



Prescribed burns are an intermediate treatment that improves wildlife habitat

Fertilization is used to increase growth. This also can be achieved with the application of herbicide. Fertilization results in faster growth and shorter rotations, which is a quicker economic return. Keep in mind that results from fertilization vary with the quality of the site. Professional advice is needed to determine the amount and type of fertilizer to use.

FINANCIAL ASSISTANCE

Financial assistance or “cost-share” for forest management practices is usually available to landowners in many forms. Cost-share programs are funded through the federal government and administered at the state and county level. Landowners enrolled in these programs may be reimbursed 40% - 90% of implementation costs.

Many forest practices are eligible under these federal programs. Some of these practices offered are site preparation, tree planting, prescribed burning, fire lane construction, pre-commercial thinning, stream crossings, culverts, water bars, wing ditches, seeding and mulching, and herbicide applications. A brief description of the available programs follows along with a summary of these programs in the table on the pages 19 and 20.

Southern Pine Beetle Prevention & Restoration Program

The Southern Pine Beetle Prevention & Restoration Program (SPBPRP) is designed to assist landowners in the management of the SPB threat to their pine stands. Management practices can be cost-shared at 40% - 50%. Low density planting (436 or 454 seedlings per acre), pre-commercial thinning, reducing vegetative competition, identifying and thinning high hazard stands when beetle populations are low and replacing SPB destroyed stands with low density stands all qualify as management practices for this program that is managed by AFC. There is a monetary award for the first time thinning of dense stands. Minorities and limited resource landowners may receive up to 75% cost-share. Apply at your local AFC office.

Environmental Quality Incentives Program

Environmental Quality Incentives Program (EQIP) addresses natural resource concerns on eligible land in forestry, livestock, and agriculture. EQIP is subject to NRCS technical standards adapted for local conditions. Cost-share is 50% - 75% of the cost of certain conservation practices while limited resource producers and beginning farmers and ranchers may be eligible for cost-shares up to 90%. These are some practices eligible for cost share reimbursement: planting, site preparation, prescribed burning, forest stand improvement, planting wildlife food plots, water bars, wing ditches, and all weather crossings to prevent stream erosion. Apply at your local NRCS office.

Continuous Sign-Up Conservation Reserve Program

Continuous Sign-Up Conservation Reserve Program (CRP) is administered by the Farm Service Agency (FSA) and includes the Riparian Forest Buffer Program (CP22) that provides cost-share for planting hardwood trees and shrubs in 180 foot buffer strips along streams or ponds. Another advantage to CP22 is a riparian zone tax credit (administered by the Arkansas Natural Resources Commission)

that must be applied for before a project begins. The Wetland Restoration Program (CP23) restores the functions and values of wetlands ecosystems that have been devoted to agriculture use. The Bottomland Timber Establishment on Wetlands Program (CP31) gives 50% cost-share for restoring land in 100-year flood plains. Annual soil rental payments and cost-share is awarded for all CRP practices. Continuous CRP is not competitive and there is no ranking of applications. Apply for any of the Continuous CRPs at your local FSA office at any time.

General Program Sign-Up Conservation Reserve Program

General Program Sign-Up Conservation Reserve Program (CRP) is administered by the FSA and is a 50% cost-share program for implementing an approved conservation plan that includes planting either pine or hardwood seedlings along with an annual rental payment for 10-15 years. Applications are competitive and must be ranked before awarded. For more information, contact your local FSA county office. Applications must be made during a sign-up period and all land must have a cropping history.

Partners for Wildlife

Partners for Wildlife (PFW) will help those restoring degraded wetlands, native grasslands, streams, riparian areas and other habitat with up to 100% cost sharing available. Approved bottomland hardwood or shrub species can be planted in this program. Apply at the USFWS office in Conway, AR by calling 501-513-4470.

Wildlife Habitat Incentives Program (WHIP)

Wildlife Habitat Incentives Program (WHIP) offers 50% - 75% cost-share assistance to develop and improve fish and wildlife habitat and is administered by NRCS. Apply at your local NRCS office.

Wetlands Reserve Program (WRP)

Wetlands Reserve Program (WRP) is for establishing bottomland hardwood forests. Landowners can receive up to 100% cost reimbursement for essential practices. For more information, contact your local NRCS office. Perpetual, 30-year or 10-year conservation easements are usually required for this program.

Contact your local AFC, NRCS, or FSA office for updated information about the federal cost-share programs in your county.

An up-to-date cost-share program summary is available on AFC's website, www.forestry.state.ar.us/manage/CS_summary.pdf. There are many other programs available for you from state agencies and private organizations. The Index on page 27 has a table of contact numbers for each county as well as their website addresses.

	ARKANSAS COST-SHARE PROGRAMS FOR FORESTRY PRACTICES		
	CRP (Regular)	CRP (Continuous)	EQIP
Sign-up Agency	FSA	FSA	NRCS
Sign-up Period	TBA	Continuous	Continuous
Land Eligibility	Erodible cropland & conserving uses (cropped 4 of 6 years)	Riparian areas (pastureland or cropland) or bottomland wetlands	NIPL
Practices Offered	CP3-Pine planting, light disking, mowing, chemical application, fertilizing, interplanting CPA3A-Hardwood planting, chemical application,FSI, fertilizing CP11-Control burn, fertilizing, mowing, chemical application, FSI	CP22- 50% practice costs plus 40% incentive pay, \$100/ac. signing bonus CP23- 50% (+25% hydrology) CP31- 50% cost share (all with payments to 15 yrs.)	Firebreaks, prescribed burning, BMP's (water bars, diversion ditches, dips, etc.), tree planting, pre-commercial thinning, FSI, etc.
Contract Period	10 - 15 years	10 - 15 years, CP31 (14 - 15 years)	1 - 10 years
Cost-share or Payments	1) 50% of practice costs 2) Per acre payments: 10 years for pine planting and up to 15 years for hardwood planting	CP22- 50% practice costs plus 40% incentive pay, \$100/ac. signing bonus CP23- 50% (+25% hydrology) CP31- 50% cost share (all with payments to 15 yrs.)	Practices above are at 50% except prescribed burning which is at 75% cost-share rate
Min. / Max. Project Amount	No Maximum	No Maximum	Maximum \$450,00
Hardwood Spacings	10X10 (436),10X12 (363), 12X12 (303), or cottonwood 12x12 (303)	Same as for CRP & CP22-plant at least 2 spec., CP23/CP31 plant at least 3 spec.	12X12 - (303)
Pine Spacings	Same as Continuous CRP (500-550 tpa = 50 pts.)	Same as for CRP & CP22-plant at least 2 spec., CP23/CP31 plant at least 3 spec.	12X12 - (303)
Minimum Seedlings for Establishment (Pine / Hardwood)	150 TPA	300 TPA 150 TPA	300 TPA 150 TPA

O * ABBREVIATIONS: AFC (Arkansas Forestry Commission), AGFC (Arkansas Game & Fish Commission), CRP(Conservation Reserve Program), DU (Ducks Unlimited), EQIP(Environmental Quality Incentives Program), FSA (Farm Service Agency), FSI (Forest Stand Improvement), NRCS (Natural Resources Conservation Service), NIPL (Non-industrial Private Landowner), PFW (Partners for Wildlife), SPBPRP (Southern Pine Beetle Prevention & Restoration Program), TPA (Trees Per Acre), USFWS (US Fish & Wildlife Service), WRP (Wetlands Reserve Program), & WHIP (Wildlife Habitat Incentives Program). * STATE HQ NUMBERS: AFC (501-296-1940), AGFC (800-364-4263), DU (501-955-9264), FSA (501-301-3053), NRCS (501-301-3100), & USFWS (501-513-4473).

ARKANSAS COST-SHARE PROGRAMS FOR FORESTRY PRACTICES			
PFW	SPBPRP	WHIP	WRP
USFWS	AFC	NRCS	NRCS
Continuous	TBA	Continuous	Continuous
NIPL or Industry	NIPL	NIPL	Agricultural land suitable to wetland restoration
1) Bottom-land hrdwd. planting 2) Declining habitats 3) Invasive species	1) Pre-comm. thinning 2) Non-commercial suppression 3) Site Preparation 4) Pine Planting 5) Burn for veg. control 6) Pine release	Burning, FSI, fire breaks, pre-commer. thinning; hrdwd.- some pine planting, site prep.	Burning, FSI, fire breaks, pre-commercial thinning
25 years	10 years	10 - 15 years	Permanent / 30 yrs / 10 yrs
Up to 100% for planting costs	1) 50%-75% of practice costs up to established maximums 2) Pine thinning incentive payment (1st time) \$30 - \$50/ac.— comm./ non-comm.	Practices listed above are at 75% except site prep. which is at 50%	Easements: 1.) Perm. -(100% apprais. land value plus 100% of the restoration costs) 2) 30 Yr.- (75% of apprais. Land value + 75% of restor. costs) 3) 10 yr.- (75% restor. costs)
No Minimum Maximum = \$25,000 / yr	Min. plant. - 5 ac; Supp./thin No Min. Max. = \$10,000 / yr	No Min. Max. = \$10,000 / yr	N/A
10X10-(436) or 12X12-(303)	N/A	Same as for CRP plus 15 X 15	12X12 - (303) or 15X15 - (194)
N/A	10x10 - (436 TPA) 8x12 - (454 TPA)	Same as Continuous CRP	Same as Continuous CRP
70-80% 70-80%	300 TPA N/A	300 TPA 50% prescribed	N/A 50% prescribed

O * The Wetland & Riparian Zones Tax Credit Program allows Arkansas tax credit for landowners planting in wetland or riparian areas. Contact the Arkansas Natural Resource Commission @ 501-682-3980.

O * Wildlife cost-share practices and other conservation practices are also offered under CRP, EQIP, PFW, & WHIP. Please contact the appropriate agency office.

NOTE: All programs are subject to policy changes. Landowners should check with the agency administering the program for program updates.

MANAGING FOR MULTIPLE USE

Wildlife

Wildlife habitat improvement is important to many forest landowners. Increasing the production of wildlife depends on the availability of food and cover.

It is important to identify the wildlife species you prefer in your management plan so management activities can be targeted to enhance habitat. Hollow den trees may be desirable and an objective for some landowners.



Wildlife management is some landowners' objective.

Usually, wildlife need openings in the forest. Generally, 5% of the forest should be in openings for wildlife.

The forest should also be thin enough to allow some sun light to reach the forest floor. Light allows herbaceous plants to grow as a food source. Animals can only eat what they can reach. If the forest looks clean underneath and park-like, there is probably not much food available.

Agroforestry

Some forest conditions provide opportunities for livestock grazing. A practice called silva-pasture allows for the management of both trees and livestock on the



Livestock grazing is an example of agroforestry.

same acres. Silva-pasture has the advantage of frequent financial returns from the cattle with long-term returns on the trees. In the right situation, the combination will return more than either the livestock or forest operation alone.



Recreation

The family forest provides recreational opportunities for the forest landowner. The forest provides space, shade, fishing, hunting, and most of all an opportunity to get away from the pressures and tensions of daily life. Hiking, horseback riding, and bike riding can be done over a network of forest roads and fire breaks.

Recreation is an important management objective for many landowners.

Aesthetics

Aesthetics often govern how a forest is managed. Trees and shrubs with showy flowers or colorful foliage may be favored over more economically important trees. Some prefer the appearance of an open, parklike forest. Some like to create songbird habitat.



Some landowners chose aesthetics as their objective and the vibrant fall colors in Arkansas are one example.

FORESTRY TAX CONSIDERATIONS

There are certain tax benefits that a landowner can take advantage of when managing timberland. The old adage “what you don’t know can hurt you” is true when it comes to a landowner not knowing and taking advantage of these benefits. Some of the tax benefits a landowner should consider are listed in the following:

- Take advantage of the federal reforestation tax credit and amortization when planting seedlings.
- When planting in riparian or wetland areas on your property, take advantage of the Arkansas “Wetland and Riparian Zones Tax Credit Program.” This Arkansas program allows a credit against the tax imposed by the Arkansas Income Tax Act for any taxpayer engaged in the development or restoration of wetlands and riparian zones. Contact Arkansas Natural Resources Commission at 501-682-3980 for details.
- Take advantage of applicable casualty losses. A casualty loss results from unexpected, sudden, and unusual events from natural or external forces. Examples of casualty losses include tornadoes, floods, wildfires, hail, and ice storms. Gradual or progressive loss does not count as casualty losses. For example, death caused by drought, disease, or natural competition is not a casualty loss. The loss amount is limited to the loss in fair market value or basis in the property, whichever is lower. You are required to make a reasonable effort to salvage your timber.
- Develop a basis in your timberland if you haven’t already. This is especially important when making a timber sale. A basis is the value in the timber when acquired. A basis will help reduce the amount of timber proceeds a landowner has to pay taxes on when selling timber.
- Take advantage of capital gains treatment of timber sale income. Income will be treated as a capital gain if the timber has been owned at least a year and a day. There is no required holding period for inherited timber to claim a capital gain. For gifted property, the holding period of the giver and the recipient must total a year and a day.

For more information visit National Timber Tax Website at www.timbertax.org or AFC’s website listed in the index.

The natural beauty of a family forest is enhanced by the care taken to preserve and improve favorite scenic areas.

GET PROFESSIONAL HELP

Professionals are available to assist landowners at no cost to help them reach their goals for their forestland. They will recommend the proper practices and assist the landowner in receiving financial assistance to implement the practices. Properly managed forests are healthier, provide more income, and can provide enjoyment for the landowner regardless of your objectives.



Contact professional foresters for assistance in forest management.

For more information on the topics mentioned in this booklet, the AFC has a Landowner's Forest Library CD that has fact sheets on various topics. The CD is available at any AFC office.

Visit the AFC's website at www.forestry.state.ar.us. The UACES website also has fact sheets on various topics www.uaex.edu. The AGFC has a great website with wildlife information www.agfc.com.

Following is a county level index followed by a state and federal level index of various agencies that can be a tremendous help and have a wealth of information available to you. Please contact your county level representative or visit their websites. They will be happy to assist you in your land-use goals.

ARKANSAS FORESTRY COMMISSION DISTRICT OFFICES



- | | |
|-----------------|--------------|
| 1. Monticello | 870-367-6767 |
| 2. Dierks | 870-286-2139 |
| 3. Forrest City | 870-633-6693 |
| 4. Stamps | 870-533-4641 |
| 5. Malvern | 501-332-2081 |
| 6. Clarksville | 479-754-2701 |
| 7. Mt. View | 870-269-3441 |
| 8. Ash Flat | 870-994-2187 |
| 9. Greenbrier | 501-679-2806 |

ARKANSAS GAME AND FISH COMMISSION DISTRICT OFFICES



Keeping the Natural State natural.



- | | |
|--------------------|--------------|
| 1. Jonesboro | 877-972-5438 |
| 2. Brinkley | 877-734-4581 |
| 3. Monticello | 877-367-3559 |
| 4. Camden | 877-836-4612 |
| 5. Perrytown | 877-777-5580 |
| 6. Mayflower | 877-470-3650 |
| 7. Barling | 877-478-1043 |
| 8. Russellville | 877-967-7577 |
| 9. Calico Rock | 877-297-4331 |
| 10. Eureka Springs | 866-253-2506 |

QUICK LINKS FOR MORE INFORMATION

County Burn Bans www.forestry.state.ar.us
or www.arkfireinfo.org

Wildfire Danger www.forestry.state.ar.us
or www.arkfireinfo.org

Arkansas Firewise www.arkansasfirewise.com

Arkansas Forestry Vendors www.forestry.state.ar.us/manage/vendors.html

AFC Seedling Price List www.forestry.state.ar.us/seedlingsales_p3.html

BMP Guidelines www.forestry.state.ar.us/bmp/bmp_review.html

Consulting Foresters www.forestry.state.ar.us/manage/consultantforesters.html

Timber Bid Form www.forestry.state.ar.us/pdf/bid_form.pdf

QUICK LINKS FOR MORE INFORMATION

Forestry Industry Directorywww.forestry.state.ar.us/manage/inddirectory.pdf

General State Stumpage Reports
from Cooperative Extension www.arnatural.org/News/Timber_Report

Federal Timber Tax www.timbertax.org

South-wide Stumpage Reportswww.tmart-south.com **or** www.forest2market.com

Sample Timber Contract... www.forestry.state.ar.us/pdf/Timber_sale_contract.pdf

Timber Buyers www.forestry.state.ar.us/manage/buyer_search.php

State & Federal Agency County Level Contacts

COUNTY	Arkansas Forestry Commission	Arkansas Game and Fish Commission	Arkansas Association of Conservation Districts
ARKANSAS	870-673-2851 Stuttgart	877-367-3559 Monticello	870-946-3331 Dewitt
ASHLEY	870-364-3524 Crossett	877-367-3559 Monticello	870-853-9881 Hamburg
BAXTER	870-481-5501 Midway	877-297-4331 Calico Rock	870-425-3527 Mt. Home
BENTON	479-795-0077 Bentonville	866-253-2506 Eureka Springs	479-273-2622 Bentonville
BOONE	870-743-2210 Harrison	877-967-7577 Russellville	870-741-8600 Harrison
BRADLEY	870-463-8505 Hermitage	877-367-3559 Monticello	870-226-6751 Warren
CALHOUN	870-798-3835 Hampton	877-836-4612 Camden	870-798-4297 Hampton
CARROLL	479-253-5005 Eureka Springs	866-253-2506 Eureka Springs	870-423-2638 Berryville
CHICOT	870-364-3524 Crossett	877-367-3559 Monticello	870-265-5312 Lake Village
CLARK	870-246-5372 Arkadelphia	877-836-4612 Camden	870-246-9817 Arkadelphia
CLAY	870-932-2251 Jonesboro	877-972-5438 Jonesboro	870-598-2287 Piggott
CLEBURNE	501-362-2463 Heber Springs	877-297-4331 Calico Rock	501-362-2628 Heber Springs
CLEVELAND	870-348-5728 Kingsland	877-367-3559 Monticello	870-325-6581 Rison
COLUMBIA	870-234-3485 Magnolia	877-836-4612 Camden	870-235-5270 Magnolia
CONWAY	501-354-4572 Springfield	877-967-7577 Russellville	501-354-2000 Morriton
CRAIGHEAD	870-932-2251 Jonesboro	877-972-5438 Jonesboro	870-972-4671 Jonesboro

State & Federal Agency County Level Contacts

Farm Services Agency	Natural Resources Conservation Service	University of Arkansas Cooperative Extension Service
870-946-3331 DeWitt	870-946-3331 DeWitt	870-946-3231 DeWitt
870-853-9881 Hamburg	870-853-9881 Hamburg	870-853-2080 Hamburg
870-425-2250 Mountain Home	870-425-2250 Mountain Home	870-425-2335 Mountain Home
479-273-2622 Bentonville	479-273-2622 Bentonville	479-271-1060 Bentonville
870-741-8600 Harrison	870-741-8600 Harrison	870-741-6168 Harrison
870-226-6751 Warren	870-226-6751 Warren	870-226-8410 Warren
870-226-6751 Warren	870-226-6751 Warren	870-798-2231 Hampton
870-423-2767 Berryville	870-423-2638 Berryville	870-423-2958 Berryville
870-265-5312 Lake Village	870-265-2608 Lake Village	870-265-8055 Lake Village
870-246-9816 Arkadelphia	870-246-9816 Arkadelphia	870-246-2281 Arkadelphia
870-598-2287 Piggott	870-598-2287 Piggott	870-598-2246 Piggott
501-362-2628 Heber Springs	501-362-2628 Heber Springs	501-362-2524 Heber Springs
870-352-2630 Fordyce	870-352-2630 Fordyce	870-325-6321 Rison
870-921-4206 Lewisville	870-921-4206 Lewisville	870-235-3720 Magnolia
501-354-2000 Morrilton	501-354-2000 Morrilton	501-354-9618 Morrilton
870-972-4671 Jonesboro	870-972-4671 Jonesboro	870-933-4565 Jonesboro

State & Federal Agency County Level Contacts

COUNTY	Arkansas Forestry Commission	Arkansas Game and Fish Commission	Arkansas Association of Conservation Districts
CRAWFORD	479-632-0209 Rudy	877-478-1043 Barling	479-474-2281 Van Buren
CRITTENDEN	870-633-6693 Forrest City	877-734-4581 Brinkley	870-739-4464 Marion
CROSS	870-633-6693 Forrest City	877-734-4581 Brinkley	870-238-3285 Wynne
DALLAS	870-254-2429 Carthage	877-836-4612 Camden	870-352-2630 Fordyce
DESHA	870-367-6767 Monticello	877-367-3559 Monticello	870-222-4867 McGehee
DREW	870-367-6767 Monticello	877-367-3559 Monticello	870-367-8400 Monticello
FAULKNER	501-679-2806 Greenbrier	877-470-3650 Mayflower	501-327-6509 Conway
FRANKLIN	479-667-4111 Ozark	877-478-1043 Barling	479-667-8600 Ozark
FULTON	870-895-2934 Salem	877-297-4331 Calico Rock	870-895-3201 Salem
GARLAND	501-984-5733 Hot Springs	877-470-3650 Mayflower	501-624-2574 Hot Springs
GRANT	870-942-3051 Sheridan	877-836-4612 Camden	870-942-2826 Sheridan
GREENE	870-932-2251 Jonesboro	877-972-5438 Jonesboro	870-239-8586 Paragould
HEMPSTEAD	870-887-7512 Emmet	877-777-5580 Perrytown	870-777-8800 Hope
HOT SPRING	501-332-2081 Malvern	877-836-4612 Camden	501-337-7381 Malvern
HOWARD	870-286-2119 Dierks	877-777-5580 Perrytown	870-845-4121 Nashville
INDEPENDENCE	870-793-2446 Batesville	877-297-4331 Calico Rock	870-793-4164 Batesville

State & Federal Agency County Level Contacts

Farm Services Agency	Natural Resources Conservation Service	University of Arkansas Cooperative Extension Service
479-646-8300 Fort Smith	479-646-8300 Fort Smith	479-474-5286 Van Buren
870-739-4464 Marion	870-739-4464 Marion	870-739-3239 Marion
870-238-3285 Wynne	870-238-3285 Wynne	870-238-5745 Wynne
870-352-2630 Fordyce	870-352-2630 Fordyce	870-352-3505 Fordyce
870-222-4867 McGehee	870-222-4867 McGehee	870-222-3972 McGehee
870-367-8400 Monticello	870-367-8400 Monticello	870-460-6270 Monticello
501-327-6509 Conway	501-327-6509 Conway	501-329-8344 Conway
479-667-8600 Ozark	479-667-8600 Ozark	479-965-2272 Charleston
870-895-3201 Salem	870-895-3201 Salem	870-895-3301 Salem
501-624-2574 Hot Springs	501-624-2574 Hot Springs	501-623-6841 Hot Springs
501-758-2251 North Little Rock	501-778-2251 Benton	870-942-2231 Sheridan
870-239-8586 Paragould	870-236-8586 Paragould	870-236-6921 Paragould
870-777-8800 Hope	870-777-8800 Hope	870-777-5771 Hope
501-337-7381 Malvern	501-337-7381 Malvern	501-332-5267 Malvern
870-845-4121 Nashville	870-845-4121 Nashville	870-845-7517 Nashville
870-793-4164 Batesville	870-793-4164 Batesville	870-793-8840 Batesville

State & Federal Agency County Level Contacts

COUNTY	Arkansas Forestry Commission	Arkansas Game and Fish Commission	Arkansas Association of Conservation Districts
IZARD	870-368-4545 Melbourne	877-297-4331 Calico Rock	870-368-4413 Melbourne
JACKSON	870-932-2251 Jonesboro	877-972-5438 Jonesboro	870-523-8986 Newport
JEFFERSON	870-267-0133 Pine Bluff	877-367-3559 Monticello	870-534-3200 Pine Bluff
JOHNSON	479-754-3125 Clarksville	877-478-1043 Barling	479-754-2800 Clarksville
LAFAYETTE	870-533-4641 Stamps	877-777-5580 Perrytown	870-921-4865 Lewisville
LAWRENCE	870-869-2176 Imboden	877-972-5438 Jonesboro	870-886-7791 Walnut Ridge
LEE	870-633-6693 Forrest City	877-734-4581 Brinkley	870-295-2752 Marianna
LINCOLN	870-628-5332 Star City	877-367-3559 Monticello	870-628-4542 Star City
LITTLE RIVER	870-898-2304 Ashdown	877-777-5580 Perrytown	870-898-3611 Ashdown
LOGAN	479-963-1475 Paris	877-478-1043 Barling	479-963-2612 Paris
LONOKE	870-673-2851 Stuttgart	877-470-3650 Mayflower	501-676-5116 Lonoke
MADISON	479-738-2037 Huntsville	866-253-2506 Eureka Springs	479-738-6321 Huntsville
MARION	870-449-4800 Yellville	877-967-7577 Russellville	870-449-6356 Yellville
MILLER	870-772-7572 Texarkana	877-777-5580 Perrytown	870-773-3531 Texarkana
MISSISSIPPI	870-932-2251 Jonesboro	877-972-5438 Jonesboro	870-563-3207 Osceola
MONROE	870-673-2851 Stuttgart	877-734-4581 Brinkley	870-747-3431 Clarendon
MONTGOMERY	870-867-2013 Mount Ida	877-478-1043 Barling	870-867-2671 Mount Ida

State & Federal Agency County Level Contacts

Farm Services Agency	Natural Resources Conservation Service	University of Arkansas Cooperative Extension Service
870-368-4413 Melbourne	870-368-4413 Melbourne	870-368-4323 Melbourne
870-523-8986 Newport	870-523-8986 Newport	870-523-7450 Newport
870-534-3200 Pine Bluff	870-534-3200 Pine Bluff	870-534-1033 Pine Bluff
479-754-2800 Clarksville	479-754-2800 Clarksville	479-754-2240 Clarksville
870-921-4206 Lewisville	870-921-4206 Lewisville	870-921-4744 Lewisville
870-886-7791 Walnut Ridge	870-886-7791 Walnut Ridge	870-886-3741 Walnut Ridge
870-295-5211 Marianna	870-295-5211 Marianna	870-295-7720 Marianna
870-628-5381 Star City	870-628-5381 Star City	870-628-4247 Star City
870-898-3611 Ashdown	870-898-3611 Ashdown	870-898-7224 Ashdown
479-963-2612 Paris	479-963-2612 Paris	870-963-2360 Paris
501-676-5116 Lonoke	501-676-5116 Lonoke	501-676-3124 Lonoke
479-738-6321 Huntsville	479-738-6321 Huntsville	479-738-6826 Huntsville
870-425-2250 Mountain Home	870-425-2250 Mountain Home	870-449-6349 Yellville
870-773-3531 Texarkana	870-773-3531 Texarkana	870-779-3609 Texarkana
870-563-3207 Osceola	870-563-3207 Osceola	870-762-2075 Blytheville
870-747-3342 Clarendon	870-747-3342 Clarendon	870-747-3397 Clarendon
501-624-2574 Hot Springs	501-624-2574 Hot Springs	870-867-2311 Mount Ida

State & Federal Agency County Level Contacts

COUNTY	Arkansas Forestry Commission	Arkansas Game and Fish Commission	Arkansas Association of Conservation Districts
NEVADA	870-887-7512 Emmet	877-836-4612 Camden	870-887-3210 Prescott
NEWTON	870-429-6281 Western Grove	877-967-7577 Russellville	870-446-2236 Jasper
OUACHITA	870-836-7385 Camden	877-836-4612 Camden	870-836-2089 Camden
PERRY	501-889-2651 Perryville	877-470-3650 Mayflower	501-889-2715 Perryville
PHILLIPS	870-633-6693 Forrest City	877-734-4581 Brinkley	870-338-6651 Helena
PIKE	870-285-3745 Murfreeshboro	877-777-5580 Perrytown	870-285-2424 Murfreeshboro
POINSETT	870-932-2251 Jonesboro	877-972-5438 Jonesboro	870-578-2444 Harrisburg
POLK	870-389-6608 Hatfield	877-478-1043 Barling	479-394-1782 Mena
POPE	877-478-1043 Dover	877-967-7577 Russellville	479-968-3497 Russellville
PRAIRIE	870-673-2851 Stuttgart	877-734-4581 Brinkley	870-255-3573 Hazen
PULASKI	501-868-4330 Roland	877-470-3650 Mayflower	501-758-2544 North Little Rock
RANDOLPH	870-892-8774 Dalton	877-972-5438 Jonesboro	870-892-3325 Pocahontas
SALINE	501-594-5296 Benton	877-470-3650 Mayflower	501-778-2251 Benton
SCOTT	479-928-4688 Huntington	877-478-1043 Barling	479-637-3633 Waldron
SEARCY	870-448-5014 Marshall	877-967-7577 Russellville	870-448-3184 Marshall
SEBASTIAN	479-928-4688 Huntington	877-478-1043 Barling	479-646-8300 Fort Smith
SEVIER	870-642-6614 De Queen	877-777-5580 Perrytown	870-584-3537 De Queen

State & Federal Agency County Level Contacts

Farm Services Agency	Natural Resources Conservation Service	University of Arkansas Cooperative Extension Service
870-777-8800 Hope	870-777-8800 Hope	870-887-2818 Prescott
870-741-8600 Harrison	870-741-8600 Harrison	870-446-2240 Jasper
870-836-2089 Camden	870-836-2089 Camden	870-231-1160 Camden
501-327-6509 Conway	501-327-6509 Conway	870-889-2661 Perryville
870-338-6651 Helena	870-338-6651 Helena	870-338-8027 Helena
870-845-4121 Nashville	870-845-4121 Nashville	870-285-2161 Murfreesboro
870-578-2444 Harrisburg	870-578-2444 Harrisburg	870-578-4490 Harrisburg
479-394-1782 Mena	479-394-1782 Mena	479-394-6018 Mena
479-968-3497 Russellville	479-968-3497 Russellville	479-968-7098 Russellville
870-255-3573 Hazen	870-255-3573 Hazen	870-998-2614 DeValls Bluff
501-758-2251 North Little Rock	501-758-2544 North Little Rock	501-340-6650 Little Rock
870-892-3325 Pocahontas	870-892-3325 Pocahontas	870-892-4504 Pocahontas
501-758-2251 North Little Rock	501-778-2251 Benton	501-303-5672 Benton
479-646-8300 Fort Smith	479-646-8300 Fort Smith	479-637-2173 Waldron
870-448-3184 Marshall	870-448-3184 Marshall	870-448-3981 Marshall
479-646-8300 Fort Smith	479-646-8300 Fort Smith	479-484-7737 Fort Smith
870-584-3537 De Queen	870-584-3537 De Queen	870-584-3013 De Queen

State & Federal Agency County Level Contacts

COUNTY	Arkansas Forestry Commission	Arkansas Game and Fish Commission	Arkansas Association of Conservation Districts
SHARP	870-994-2188 Ash Flat	877-297-4331 Calico Rock	870-994-7335 Ash Flat
ST. FRANCIS	870-633-6693 Forrest City	877-734-4581 Brinkley	870-633-3055 Forrest City
STONE	870-269-3439 Mt. View	877-297-4331 Calico Rock	870-269-3726 Mt. View
UNION	870-863-7051 El Dorado	877-836-4612 Camden	870-863-8634 El Dorado
VAN BUREN	501-745-2933 Clinton	877-297-4331 Calico Rock	501-745-5161 Clinton
WASHINGTON	479-587-1442 Fayetteville	866-253-2506 Eureka Springs	479-442-4160 Fayetteville
WHITE	501-742-5446 Kensett	877-734-4581 Brinkley	501-268-5866 Searcy
WOODRUFF	870-633-6693 Forrest City	877-734-4581 Brinkley	870-347-2593 Augusta
YELL	479-495-7751 Danville	877-967-7577 Russellville	479-495-2441 Danville
MAIN OFFICE	www.forestry. state.ar.us Mike Cagle 501-296-1940 Little Rock	www.agfc.com David Long 877-972-5438 Rich Johnson 501-223-6471	Debbie Moreland 501-682-2915 Little Rock

State & Federal Agency County Level Contacts

Farm Services Agency	Natural Resources Conservation Service	University of Arkansas Cooperative Extension Service
870-994-2006 Ash Flat	870-994-2006 Ash Flat	870-994-7363 Ash Flat
870-633-3055 Forrest City	870-633-3055 Forrest City	870-261-1730 Forrest City
870-269-3726 Mt. View	870-269-3726 Mt View	870-269-3336 Mt. View
870-836-2089 Camden	870-836-2089 Camden	870-864-1916 El Dorado
501-745-5161 Clinton	501-745-5161 Clinton	501-745-7117 Clinton
479-521-4520 Fayetteville	479-521-4520 Fayetteville	479-444-1755 Fayetteville
501-268-5866 Searcy	501-268-5866 Searcy	501-268-5394 Searcy
870-347-2593 Augusta	870-347-2593 Augusta	870-347-2556 Augusta
479-495-2223 Danville	479-495-2223 Danville	479-495-2216 Danville
www.fsa.usda.gov Tony Franco 501-301-3052 Little Rock	www.nrcs.usda.gov George Rheinhardt 501-301-3143 Little Rock	www.arnatural.org Tamara Walkingstick 501-671-2329 Little Rock

Additional State and Federal Resource Contacts

<p>Tree Farm System www.treefarmssystem.org 501-374-2441</p>	<p>Arbor Day Foundation www.arborday.org</p>	<p>Arkansas Department of Environmental Quality www.adeq.state.ar.us 501-682-0744</p>
<p>Arkansas Forestry Association www.arkforests.org 501-374-2441</p>	<p>Arkansas Geographic Information Office www.gis.state.ar.us 501-682-2767</p>	<p>Arkansas Geological Commission www.arkansas.gov/agc 501-296-1877</p>
<p>Arkansas Native Plant Society www.anps.org</p>	<p>Arkansas Natural Heritage Commission www.naturalheritage.com 501-324-9150</p>	<p>Arkansas Natural Resources Commission www.aswcc.arkansas.gov 501-682-1611</p>
<p>Arkansas State Plant Board www.plantboard.org 501-225-1598</p>	<p>Arkansas Timber Info www.arkansastimber.info</p>	<p>Arkansas Timber Producers Association www.arkloggers.com 501-224-2232</p>
<p>UAM-Monticello www.afrc.uamont.edu 870-460-1052 Monticello</p>	<p>U.S. Environmental Protection Agency www.epa.gov Region 6 214-665-64444 Dallas, TX</p>	<p>National Woodland Owners Association www.woodlandowners.org 800-476-8733 Vienna, VA</p>
<p>The Nature Conservancy www.tnc.org 501-663-6699</p>	<p>United States Army Corps of Engineers www.usace.army.mil 501-324-5027</p>	<p>USDA NRCS Plant Material Center S Hwy 23 479-675-5182 Booneville</p>
<p>U.S. Fish and Wildlife Services www.fws.gov 501-513-4470 Conway</p>	<p>USFS Ouachita National Forest www.fs.fed.us/r8/ouachita 501-321-5202 Hot Springs</p>	<p>USFS Ozark / St. Francis Nat. Forest www.fs.fed.us/oont/ozark 479-964-7200 Russellville</p>

“Sample” Timber Sale Contract

The parties of this contract are (Owner Name, Owner Address), and (Name of Purchaser) hereafter called Purchaser.

GENERAL TERMS

1. For, and in consideration of, the promises and agreements hereinafter contained, (Owner) agrees to sell, and Purchaser agrees to purchase, harvest, and remove the timber included in this contract subject to the provisions hereof.

2. It is hereby understood and agreed that, except as otherwise provided herein:

a. All right, title, and interest in or to any timber included in this contract shall remain with (Owner) until paid for in full. Any timber remaining in the sale area, whether cut or uncut, beyond the contract period shall be considered abandoned by the Purchaser, and all right, title, and interest thereto shall vest to (Owner).

b. In the event any timber included in this contract is destroyed or damaged by fire, wind, flood, insects, diseases, or similar cause, to the extent it is unmerchantable, the party holding title to the destroyed or damaged timber shall bear the loss in stumpage and required deposits resulting from such destruction or damage. There shall be no obligation on the part of (Owner) to supply, or on the Purchaser to accept and pay for, other timber in lieu of that destroyed or damaged: Provided, that damage to or loss of timber removed from the sale area shall be borne by the Purchaser, and: Provided further, that this paragraph shall not be construed to relieve either party of liability for negligence.

c. Except as otherwise specifically provided, it is the intent of this contract that the Purchaser and (Owner) shall mutually agree upon the interpretation and performance of this contract; provided that within the limitations of law, upon failure to reach an agreement, the decision of (Owner) shall prevail.

d. Modifications of the terms of this contract, re-determination of rates provided for herein, and termination shall be in writing, and may be made on behalf of (Owner) only or by the appointed Owner's representative, (Name), (Address).

e. The appointed Owner's representative (Name) will make for, and accept on behalf of (Owner) all notices, requests or other action where formal written notice is required herein, or is appropriate.

- f. The appointed Owner's representative (**Owner**) will exercise the rights and duties of (**Owner**) to enforce the provisions of this contract.
- g. This contract is not transferable in whole or in part. Subcontracting all or parts of the operation is permissible. (**Owner**) will not consider a transfer of the contract.

SALE AREA

1. This sale area of _____ acres, more or less, is located in _____ County, Arkansas.
 2. The boundaries of the sale area are as shown on the attached sale area map or plat, and said map or plat is hereby made a part of this contract.
 3. Legal description: _____
- All in _____ County, Arkansas.

TIMBER BEING SOLD

1. (**Owner**) guarantees (**He or She**) has full right to transfer full title of the timber included in this sale.
2. Description of timber, which is marked in (**color**) paint and included in this sale, is as follows:
 - _____ Board Feet Pine Sawtimber – Doyle Rule
 - _____ Board Feet Red Oak Sawtimber – Doyle Rule
 - _____ Board Feet White Oak Sawtimber – Doyle Rule
 - _____ Board Feet Miscellaneous Hardwood Sawtimber – Doyle Rule
 - _____ Cords Pine Pulpwood
 - _____ Cords Hardwood Pulpwood

(**Owner**) gives no guarantee, expressed or implied, as to the volumes described under this contract. Total acres to be harvested excluding roads, creeks and streamside management zones (SMZ) are approximately _____ acres. All trees marked with (**color**) paint inside this area can be harvested.

SELLING PRICE

For and in consideration of the sum of \$ _____ upon receipt from the Purchaser, (**Owner**) hereby agrees to sell and the Purchaser agrees to buy all forest products marked or designated for removal by (**Owner**).

PAYMENT SCHEDULE

Purchaser within thirty (30) days after award date of contract will make payment in full (certified check, cashier's check, bank draft, money order, or equivalent) to **(Owner)**. Failure to provide such payment by said date will render this contract null and void.

SALE PERFORMANCE

Performance bond is required (performance bond or irrevocable letter of credit on a bank accepted by **(Owner)**). The amount of the performance bond is ten percent (10%) of the sale price. **(Owner)** shall hold said performance bond pending final check and approval of harvest operations. Upon written notification of completion of this contract by the Purchaser, **(Owner)** will return the deposit in full, less any money withheld as damages for lack of compliance by the Purchaser with any provisions of this contract.

CONTRACT PERIOD

Purchaser shall have a period of _____ months from the award date to remove all timber for harvest.

CONTRACTOR LIABILITY

The purchaser and the subcontractors shall in all things conform to the requirements of the Workman's Compensation Act of the Law of the State of Arkansas in the performance of this contract.

Purchaser shall specifically and distinctly assume all risk of damage or injury to person(s) or property resulting from any actions or operations connected with work performed under this contract. Further, Purchaser shall protect, and hold harmless from liability **(Owner)** or the Owner's representative or agent _____, from any such damage or injury.

GENERAL HARVESTING PROVISIONS

1. Purchaser or Purchaser's representative agrees to have a conference with **(Owner)** or his/her designee, **before** harvesting begins in order to discuss logging plans or any other phases of the harvest operation as desired. Purchaser will notify Owner's representative before moving any equipment on site and on ground harvesting operation begins and ends.
2. **(Owner)** or representative reserves the right to check harvest operations at any time to determine whether Purchaser is meeting the provisions of this contract.
3. Purchaser shall have free ingress and egress over **(Owner)** property to the sale site. Securing rights of ingress and egress over adjoining property not owned or controlled by **(Owner)** shall be the responsibility of Purchaser.

4. Purchaser will use existing roads and trails wherever practicable. Purchaser may erect, on (Owner's) controlled land, roads or other improvements necessary in the harvesting of timber included in this contract provided, however, that (Owner) approves the plans and locations in advance.

5. Purchaser will implement Arkansas's "Best Management Practice Guidelines for Silviculture" during all harvesting operations of this sale when applicable. Examples of BMPs to protect water quality are:

Honoring designated "Streamside Management Zones" along non-ephemeral streams or lakes;

Removing significant logging debris from streams;

Designing roads and skid trails to minimize stream crossings;

Following recommended BMP guidelines in constructing stream crossings;

Constructing broad-based dips, rolling dips, and wing ditches on roads and major skid trails as needed;

Halting harvest operations on days when soil moisture allows equipment to cause excessive rutting;

Properly closing out the harvest site by installing water bars on non-active roads and skid trails; also seeding where soil is subject to erode (roads and skid trails) – see addendum for specifications; and

Purchaser will harvest only trees marked with (color) paint inside the SMZ. The SMZ is flagged in (color) ribbon or marked with _____.

6. Purchaser agrees to have a contractor on the site that has completed the Arkansas Pro Logger training program or has a comparable certificate of training that complies with the training recommended by the American Forest and Paper Association's Sustainable Forestry Initiative.

7. Purchaser shall protect property such as roads, fences, utility lines, ditches, bridges, and other structures or improvements, against unnecessary injury and shall repair damage caused by Purchaser by restoring such damage immediately to the condition found prior to damage.

8. Purchaser is responsible for all tools, equipment and property of every description used in the harvest operation. Purchaser shall remove all tools, equipment and all other temporary improvements placed on the premises by him to the satisfaction of (Owner) before expiration of this contract.

9. Purchaser will merchandise all trees, including tops, to the lowest diameter for commercially salable products.

10. Purchaser has the option to harvest or leave marginal trees marked with an "X".
11. Stump height limit is twelve (12.0) inches for log trees, and six (6.0) inches for pulp trees, except for those trees wherein wire, nails, visible defect, or excessive flare necessitates cutting higher than the above-stated limit.
12. Purchaser will not cut or injure any witness trees or monuments, except such minor injury and damage as is necessary under normal and careful harvest procedures. (Owner) or (Owner's) representative will determine the amount of any damage deemed excessive or unnecessary and will notify Purchaser in writing. The determination is final and binding on the Purchaser through his/her performance bond subject only to written appeal within thirty (30) days of such notification.
13. Purchaser will not cut or damage any trees not marked with (color) paint and inside the designated timber harvest area unless agreed upon by the Owner's representative. Trees cut or damaged to the point of loss of growth or mortality shall be paid for at triple the contract price to Owner.
14. (Owner) will be notified immediately if wildfire occurs. Purchaser shall prevent his operations from causing wildfire and shall use his/her employees and equipment to suppress any wildfires on the sale areas. Purchaser is responsible for damages from fire resulting from negligence by his/her employees or agents.
15. Purchaser will keep all roads, trails, power, utility, and boundary lines free of slash and other debris, or other damage at his expense.
16. Grantor(s) represent and warrant that, to the best of their knowledge, there are no threatened or endangered species of fish or wildlife on any of the land, nor is there any existing or proposed finding or promulgation under state or federal endangered species law, rule or regulation that would prevent Grantee from harvesting the timber on said land by conventional methods. If Grantee is prohibited, or restricted in any manner, from harvesting the timber conveyed herein by action or threat of action by any state or federal agency charged with enforcement of endangered species laws, rules or regulations; or, if Grantee or it's agents, employees or contractors discover or observe a threatened or endangered species upon the land before or after commencement of harvesting operations, which causes Grantee to refrain from or halt harvesting operations in order to comply with such laws, rules or regulations; then in that event, Grantors shall reimburse Grantee immediately for that portion of the purchase price of the timber attributable to the volume of timber which cannot be harvested as a result of such action threat of action, observation, or discovery. The volume of timber which cannot be harvested shall be determined by joint cruise conducted by Grantor(s) and Grantee.

17. Letters of explanation or exceptions to any of the conditions set forth herein are attachments to, and become part of, this contract.

SIGNATURES AND ACKNOWLEDGEMENTS

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the __ day of _____, _____.

Witness: _____ By: (Owner Representative)

Title: _____

Witness: _____ By: (Purchaser Representative)

Title: _____

(Purchaser)

(Business Address)

(City, State, Zip Code)

Timber Sale Contract Addendum

GUIDELINES FOR WATERBARS AND REVEGETATION OF ROAD, SKID TRAILS AND LANDINGS

Water bars act to divert side ditch and surface runoff, which minimizes erosion, and provide conditions suitable for revegetation.

Construction:

1. Water bars should be placed at a slight angle to the road, firebreak or skid trail. The water bar slows the water, promotes deposition of sediment in the water, and then allows the water to slowly exit the road with minimal washing. The greater the percentage of slope, the less the angle of the water bar should be to the road surface.
2. Stabilizing the water bars at construction will prevent additional erosion
3. The following table is a guide for spacing between water bars:

<u>Grade of Road (Percent)</u>	<u>Distance between Water Bars (Feet)</u>
2	250
5	135
10	80
15	60
20	45
30	35

4. To fully intercept any ditch flows, the uphill end of the water bar should extend beyond the side ditch line of the road and tie into the cut bank blocking the ditch.
5. The outflow end of the water bar should be fully open and extend beyond the edge of the road or trail to safely disperse runoff water onto the undisturbed forest floor.
6. Requirements for effective water bar construction on forest roads, trails and firebreaks are site specific so construction should match existing soil and slope conditions.

Table 5: Recommended seed mixtures, mulching and fertilizing rates for roads, water bars, log landings, fills and other disturbed areas.

	Spring and Early Summer (March - June)		Late Summer, Fall, and Early Winter (August – February)	
Area	Seed Mixture	Seeding Rate (lbs/ac)	Seed Mixture	Seeding Rate (lbs/ac)
Mountains	Orchard Grass (Seed in late spring)	12	Annual Ryegrass	24
	Browntop Millet	40		
Statewide	Ebon Rye	80*	Elbon Rye	80*
	Winter Wheat	80*	Winter Wheat	80*
Gulf Coast or Delta	Bahia	25	Bahia	30
	Browntop Millet	10	Annual Ryegrass	20

* Fertilize with a minimum of 200 lbs. per acre of 15-15-15 (broadcast application).

* Soil PH Maintenance: Maintain soil PH of 6.5 to 7.5

* One ton of limestone = 1 point soil PH+

* One ton sulphur equivalent to 1 point soil PH-

FREQUENTLY ASKED QUESTIONS

Q. How can I keep my timberland healthy?

A. Keep stands thinned periodically to increase growth rates to reduce stress. Have your timber checked by a professional forester periodically for insects and disease.

Q. How do I increase the number of wildlife in my land?

A. Identify the wildlife wanted and manage your property to increase their food and cover sources accordingly. Get an Arkansas Game and Fish Commission Private Lands Wildlife Biologist to examine your property to enhance the habitat. (see arkansashabitat.org/pages/2007_PLB_Map.html)

Q. How do I sell my timber?

A. Studies have shown that landowners that utilized Forest Consultants realize more income from their timber and the stand is left in better condition after the sale. If you sell your timber yourself get at least 3 bids and have a good contract with a performance bond included (see www.forestry.state.ar.us/manage/timber_buyer.html)

Q. What color of paint is used to mark property line boundaries?

A. Arkansas law specifies a particular color to be used. (see www.forestry.state.ar.us/manage/posting.pdf)

Q. How do I know if my county is in a burn ban?

A. Contact the County Judge where your property is located or Arkansas Forestry Commission (AFC) offices or call AFC Dispatch Office at 1-800-830-8015 (see www.arkfireinfo.org)

Q. Who do I contact if I want to do a prescribe burn on my property. Who do I call to report a Wildfire?

A. Contact the local AFC office or call the AFC Dispatch Office at 1-800-830-8015 (see www.arkfireinfo.org)

Q. What cost share programs are available to help me pay for forestry practices needed on my land?

A. See www.forestry.state.ar.us/manage/incentives.html

Q. My tree is dying. How can I learn what is wrong with it?

A. Contact a local AFC County Forester or Ranger to evaluate it. (see www.forestry.state.ar.us/manage/landowners.html)

Q. How can I determine if I have a “Champion” size tree?

A. See www.forestry.state.ar.us/education/education.html or contact the Arkansas Forestry Commission Conservation Education office at (501) 296-1937.

Q. How do I know how much my timber is worth?

A. Get a Registered Consulting Forester to appraise your timber (see www.forestry.state.ar.us/manage/timbersale.html). Also, check the quarterly market report. (see www.arnatural.org/News/Timber_Report/default.htm)

Q. Who do I contact in order to buy seedlings for planting my land?

A. Call AFC Baucum Nursery in North Little Rock (501) 907-2485 or order on line at (see www.forestry.state.ar.us/seedlingsales.html). Seedlings that the AFC sells are for afforestation or reforestation purposes. The AFC will begin accepting orders July 1 each year.

Q. Who will to plant my trees?

A. See vendor www.ark.org/afc_search/app/vendor_criteria.html

Q. How do I purchase a “Trees of Arkansas” book?

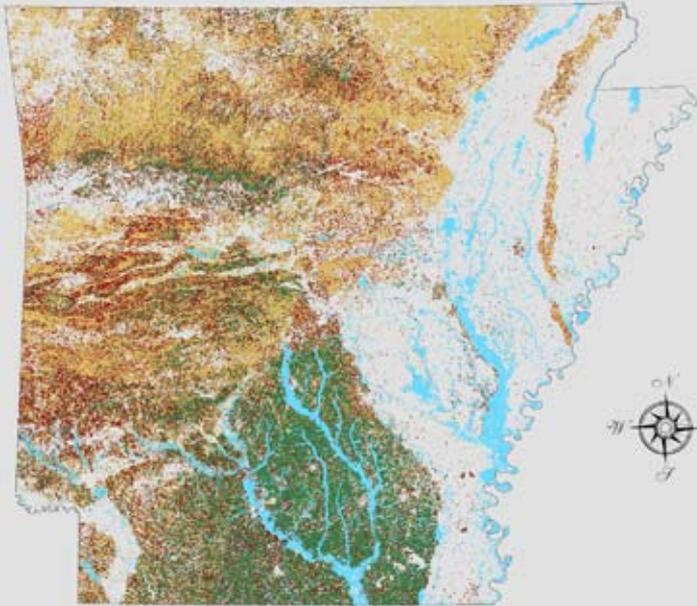
A. Trees of Arkansas books can ordered online or purchased at any AFC office. (see www.forestry.state.ar.us)

Q. Who can I get to check out my timberland?

A. Contact a local AFC County Forester to evaluate it. (see www.forestry.state.ar.us/manage/landowners.html)



Arkansas Forests



0 12.5 25 50 75 100 Miles

Source: USGS National Land Cover Data

- Deciduous
- Evergreen
- Mixed
- Forested Wetlands



ARKANSAS FORESTRY COMMISSION

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