Top Dollar for Your Timber: Sustaining Arkansas' Hardwood Forests

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For more information contact:
Forestry and Natural Resources Management
Winrock International
38 Winrock Drive
Morrilton, Arkansas 72110-9370

Top Dollar for Your Timber: Sustaining Arkansas' Hardwood Forests

By
Erin Hughes
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Preface

This study shares lessons learned from a project designed to promote sustainable forestry in two regions of Arkansas. Private forest landowners practiced sustainable forestry when they learned the value of their timber and options for managing their hardwood forests. The message was simple — hardwood timber has value and public and private forest services are available to help landowners make informed decisions regarding their woodlands. This report describes project activities and provides guidelines for replicating the successful components.

Foresters, extension agents and others interested in sustainable forest management will find this report useful. In addition, this paper may be of interest to students of community forestry, and those interested in encouraging forest management among non-industrial private forest owners.

Several organizations and people deserve recognition for this project. The project and this case study have been funded by a grant from the Southern Region Sustainable Agriculture Research and Education Program (SARE) and the Ford Foundation. Without their support this project would not be possible.

In addition, I would like to thank those interviewed for this project. Special recognition goes to Leslee Spraggins of The Nature Conservancy, Arkansas Field Office. Not only did she play an important role throughout this project, she was invaluable in providing information for this case study. I appreciate the thoughtful comments from Dr. John Gray, Nona Fisher, Mary Laurie and special editing effort from Patti Stanley.

Realizing the Value

"People manage their trees once a generation — when they harvest," notes Douglas Butts, project coordinator of the Ozark Foothills Resource Conservation and Development Council.

In the Ozark Mountains and other regions of Arkansas, landowners do not realize the potential value of their trees. Tempted by cash offers for all their timber, they often do not even think about getting a second or third opinion on its worth.

"Trees just grow on their own. If people haven't spent any time taking care of them, they don't expect they are worth anything. An offer of any amount of money is like a gift," says Leslee Spraggins, project manager at The Nature Conservancy, Arkansas Field Office.

Many of these people are farmers who would never expect crops or livestock to grow without management. Nor would they settle for a single bid for their corn or cattle without checking unbiased sources for prices. Yet many who own valuable hardwood forest tracts, never manage them. They simply hold them and then accept the first offer they receive from a buyer when they do decide to harvest.

Indiscriminate cutting of hardwood forests takes advantage of the landowner and the landscape. Valuable, diverse hardwood forests, once prevalent in Arkansas, are slowly being replaced by conifers, pasture, or inferior hardwood forests. When landowners do not consult unbiased professional foresters, or get bids from several buyers, they rarely receive the full value — the "Top Dollar" for their timber. Typically a logger clear cuts or removes all the trees larger than a certain trunk or stump diameter — a practice which involves taking the best and leaving the rest or "high grading." In even-aged tracts in particular, this leaves genetically inferior or the least vigorous trees to regenerate the area, decreasing future quality and growth rate.

In 1994, Winrock International, in partnership with The Nature Conservancy (TNC), the Arkansas Land & Farm Development Corporation (ALFDC) and the Ozark Foothills Resource Conservation and Development Council (RC&D), initiated a *Strategy for Sustainable Forestry in Two Regions in Arkansas,* funded by the Southern Region Sustainable Agriculture Research and Education Program and the Ford Foundation. This project focused on the Arkansas portion of the Mississippi Alluvial Plain referred to as the Delta, and on the Ozark Foothills — two vastly different ecological and social areas. In both regions, however, there are limited-resource landowners who have the potential to earn income from their hardwood forests.

Winrock and its partners used participatory approaches to determine the best strategies to assist landowners. The partners formed a Working Group that planned and conducted a series of landowner workshops and individual site assessments. The Working Group consisted of state, federal and private organizations. In the Delta, The ALFDC, a well-respected and trusted community organization, established a demonstration forest. In the Ozark Foothills, the RC&D formed a woodland association to disseminate information to landowners.

Preliminary results showed that landowners who were informed about their options and available resources improved forest management and earned higher incomes from harvesting. In addition, participatory approaches were successful and planted the seed for future initiatives. Collaborative efforts established strong working relationships between government and private organizations. Organizations that work with landowners advised them to use professional services. The workshops provided a model agencies could adapt and use. At the county level, representatives worked together and were able to advise on the services and resources of the partnering organizations. Landowners became aware that woodland tracts would or could be economically valuable.

Using Markets to Solve Environmental Problems

Economists and environmentalists debate how markets affect environmental problems. What role does economic value play in how people manage a resource? This question generally arises when trying to understand how resources can be sustainably managed. Will awareness of economic value lead people to exploit a valuable resource or will they sustainably manage it for long-term returns?

Globally, economic development and unchecked growth are often blamed for environmental problems. Deforestation in industrial and non-industrial countries frequently is due to market forces. In these cases, high-value timber will be harvested before other species. The decline of teak and mahogany forests is a clear example of deforestation directly linked to high market value. Under this theory, the greater the value of the resource, the more likely it will be exploited quickly. This theory is useful in explaining the demise of valuable timber and old growth stands and the high rates of deforestation in the tropics during the last two decades. The solution to this problem is to restrict development by conserving or preserving the ecosystems through the establishment of national parks and reserves. Sustainability is then ensured by denying people the ability to extract resources for the markets.

Yet economic markets do not always promote environmental degradation. Many environmentalists and economic development specialists argue that the presence of valuable products found in the forests will encourage sustainable management. Under this assumption, if a forest generates a product or benefit of high economic value, people will be more likely to conserve the resource seeking a sustained return.

Ben and Jerry's ice cream flavor "Rain Forest Crunch" is sold under this premise. This ice cream contains Brazil nuts harvested by a tribe in the Amazon. Proceeds from ice cream sales are returned to the village. Since these nuts have economic value, the villagers are less likely to cut the trees that produce them and more likely to sustainably manage the forest to ensure a continued production. In this case, markets encourage sustainable resource management. Promoting the value of a forest product is used to conserve a valuable rain forest. Other businesses throughout the world are attempting to market forest products, that in turn, help communities and the environment.

There is, however, a fine line between sustainable extraction and exploitation. Economic theory alone cannot predict how an individual, community or corporation will manage a resource. Additional information, including knowledge of local social, cultural, environmental and political influences are necessary to understand and predict how people will use a resource.

This case study of a project educating landowners in rural Arkansas shows that access to markets and increased knowledge of the value of the resource may change people's behavior and promote sustainable resource management. While no theoretical conclusions are drawn, this report adds to the discussion by providing empirical evidence of an example where markets have encouraged sustainable forest management. Education has helped landowners appreciate the value of their timber (and non-timber products) and realize that professional foresters can help them maximize their forest benefits. After realizing the value of their timber, landowners took a greater interest in managing and selectively cutting their timber stands. While this approach does not ensure landowners will practice sustainable forest management, it shows that those who understand their options tend to manage for long-term benefits rather than clear-cut their forests for immediate cash earnings.

The Setting: Arkansas' Biophysical and Social Resources

Arkansas' unique ecological and cultural characteristics preclude it from being placed in the South, West or Midwest. Instead, Arkansas sits at the convergence of these regions' histories, cultures, climates, politics and ecology. The vastly different regions of the state illustrate how the environment has influenced the people and their histories.

Arkansas is divided into three distinct ecological zones that also serve as cultural divisions (Foti and Hanson 1992) (See Figure 1). The Delta runs along the eastern side of the state in the flood plain of the Mississippi River. The Delta's history and culture are closely aligned to those of Mississippi and Louisiana, particularly in development and establishment of plantations and the use of slave labor (Ashmore 1978, Dougan 1994, Tucker 1985).

The coastal plain lies in the southwestern portion of the state, and resembles its neighbor, eastern Texas. This area is the source of much of Arkansas' industrial timber production.

The Highlands describes the mountainous regions in the northwestern third of the state and is comprised of three distinct ranges: the Ouachita, Boston and Ozark mountains. The Ozarks rise from the Delta in Arkansas and extend north and west to Missouri and Oklahoma. The mountainous terrain influenced the settlers, people and culture. Residents of the Ozarks have more in common with people in Missouri than they do with Arkansans in the Delta (Dougan 1994).

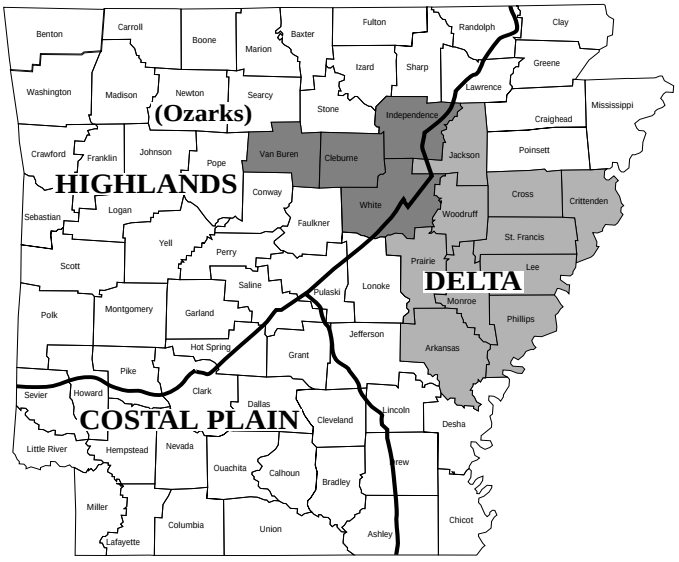

Figure 1. Three ecological zones of Arkansas with counties involved in project shaded.

This study focuses on two regions: the Delta and the Ozark Foothills. The Ozark Foothills are the first set of mountains of the range that rise from the Delta. Here, project efforts focused in Independence, White, Cleburne and Van Buren counties. In the Delta, project efforts concentrated on Lee, Phillips, St. Francis, Crittenden, Cross, Woodruff, Arkansas, Prairie and Monroe counties (see Figure 1).

The Delta

The Mississippi Delta has a history of poverty and underdevelopment compared to the rest of the United States. The lower Delta, found in Arkansas, Tennessee, Mississippi and Louisiana, continues to have the highest poverty rates in the nation. In 1993, 35 percent of the population of the nine Delta counties mentioned above lived below the poverty level on an average per capita income of $13,354 (Bell 1995). At that time, 19 percent of the state's population lived in poverty with a per capita income of $15,995, compared with the U S average of $20,817. Social statistics associated with poverty also run high in these Delta counties. Infant mortality averages 18.2 deaths per 1,000 live births, a rate high even for developing nations.

Ironically, the Mississippi Delta is endowed with rich resources and potential. The soil is extremely fertile for crops, and the river is a major transportation thoroughfare and recreation magnet. In other areas, these natural resources have been assets for economic and social development. Yet to understand the plight of the Delta today, it is necessary to look at how its history has shaped the social and environmental landscape.

The Mississippi Delta was covered with dense bottomland hardwoods and swamp forests at the time of European settlement. With the Louisiana Purchase, Arkansas became part of the U.S. Territory. The Delta was opened to plantation development in the 1850s (Ashmore 1978, Dougan 1994), and cotton became the predominate crop. Slaves provided initial labor for plantations and were later replaced by sharecroppers. The latter continued to be the primary form of labor as recently as 1930, when 63 percent of the population still worked on another's land (Ashmore 1978). Farm owners tended to be urban or out-of-state residents; this resulted in farming profits leaving the region and sometimes the state (Dougan 1994). The expansion of agricultural production involved clearing the forests. By 1930, only half of the bottomland forests remained.

With World War II came mechanized agriculture enabling larger tracts of land to be farmed by fewer people. Those who traditionally worked in fields no longer had jobs. Unemployment increased, and the only solution for many was to leave. By 1970, 20 percent of the population had migrated to areas with greater economic opportunities, and the trend continues today (Delta Cultural Center 1990). Large scale agricultural production of soybeans, rice, cotton and wheat dominate the landscape. Less than one-fifth of the original forests still stand.

Currently, agriculture and industry employ most of the Delta's residents. Unlike the Ozarks and other parts of the state, nearly half the population is African-American. Limited economic growth and few employment opportunities feed the vicious cycle of poverty, creating a weak tax base, inadequate social services, poor schools and health care facilities. Poverty traps many residents of the Delta and migration is the only way to escape. The eight counties targeted in this project had an average of 8.6 percent loss of population during 1980-1990 (Bell 1995).

The Ozarks Foothills

In contrast to the Delta, the rugged Ozarks Mountains have relatively few valuable natural resources. The soil is not suitable for farming, and many of the areas are inaccessible. The only natural resources are the forests, streams, wildlife, and natural beauty. Seventy-five percent of the forests are comprised of hardwoods that display spectacular color in the fall and attract many tourists. In addition, these forests offer economic potential in terms of timber and non-timber values while supporting the environmental health of the watersheds of the area.

The Ozark Mountains, some of the oldest in the U.S., are rocky and isolated, formed by the collision of continental plates. Initially settlers clear-cut the hardwood forests during the late 1800's and used the wood (oak, hickory, ash, elm, walnut, maple and red cedar) for railroad ties and barrel staves (Greene and Duff 1991). Farmers attempted to grow crops on the cleared hillsides, but few were successful enough to live beyond a subsistence level. Some pioneers settled temporarily in the mountains before they moved on, while others stayed. Many of those who stayed lived in isolation through the first half of the 20th century.

The history of the Ozarks is quite different from that of the Delta. There were no plantations, slaves or sharecroppers. Residents here sided with the North during the Civil War, while those in the Delta sided with their southern neighbors. Although out-migration took place in the first half of the 1900s, this trend reversed in the 1970's when the Ozarks became one of the fastest growing rural areas in the U.S.. This initial influx was due to retirees and counter-culture immigration (Ashmore 1978). Between 1980-1990, the population grew by 7.7 percent in the four counties of this project. The population, which is predominately white, continues to expand with retirees immigrating from urban areas of other states. Small towns dot the landscape throughout the Ozarks. Residents who are not retired are employed in the service sector in the towns or raise livestock such as broilers or beef.

While still below the national average, poverty in the Ozarks has not been as great as that found in the Delta. In 1993, only 18 percent of the population in the counties of this project lived below the poverty level even though the per capita income of $13,850 was similar to the Delta's $13,354. This can be attributed to the large number of retired persons who live off savings and/or pensions. The infant mortality rate was less than half of that found in the Delta, 7.48 deaths per 1,000 live births.

The Arkansas Forest Industry

Forestry has played an important role in Arkansas' development and economy. Northern lumber companies recognized the value of the state's timber in the late 1800s. After harvesting the forests in the North (New England to the Great Lake states), they turned their attention to the valuable timber of the Delta (Ashmore 1978). The trees at that time were huge pine (loblolly and shortleaf) measuring 30 inches in diameter and mature hickories, sweet gums, red oaks, white oaks and post oaks.

The Ozarks also had valuable timber. In the late 1800s, railroad expansion created a great demand for railroad ties. Residents earned money cutting white oak into railroad ties, making this profession second only to farming in the early 1900s (Tucker 1985). Lumberjacks cut cedars and floated them down the Buffalo River.

Throughout Arkansas, timber companies took advantage of inexpensive property prices intended to attract settlers. Companies bought land, cut timber and abandoned the land before they had to pay taxes (Dougan 1994). Timber became the state's major industry in the late 1800s, and Arkansas was the fourth largest producer of lumber in the U.S. (1880-1907) (Tucker 1985). Arkansas supplied raw materials for furniture, barrel staves, boxes and doors that were transported by rail to the world. Most of the timber companies were based out-of-state and neither the timber nor the profits remained in Arkansas (Ashmore 1978).

What Constitutes A Forest ?

The U.S. Forest Service defines **forest land** as an area with at least 10 percent with forest trees of any size, or formerly having such tree cover that is not currently used for other uses.

Timberland is forest land that produces or capable of producing crops of industrial wood and is not being used for other uses.

(Rosson et al 1995)

Today, Arkansas' forests continue to play a significant role in the state's economy (Henderson, Gray, Greene and Marsh 1992). The forest industry employs 17 percent of the state's work force. The 1994 Arkansas Forestry Industry Directory showed that 536 primary and secondary wood manufacturers depended on the forests of Arkansas; 228 of these firms used hardwoods (Arkansas Forestry Commission 1994). In addition, the forests contribute to the state's economy by attracting tourists (the third largest industry in Arkansas), and provide a host of environmental benefits. Unsustainable forest use can damage Arkansas' economy by affecting forest industry and causing costly environmental problems such as erosion, siltation in rivers and loss of wildlife.

More than half of Arkansas' forested land is owned by non-industrial private landowners. The remaining forests are the property of forest products companies (25 percent) and public agencies (18 percent) (Beltz, Bertelson, Faulkner and May 1992). Most of the highly productive timberland lies in the south where forest products companies that own the land raise trees for the timber, pulp or paper market. In the Ozarks and in the Delta, private landowners with small holdings own most of the forests. The Delta has less forest area than the Ozarks, but much of the Delta has the potential to grow economically valuable tree species. In some cases, raising timber may be more profitable than growing crops (Amacher et al. 1997). Yet a recent survey found that only 15 percent of the landowners with forests in the Delta use the advice of a professional forester and manage their trees (Williams and Kluender 1997).

Non-Industrial Private Landowners Shape the Landscape

Industrial forest owners grow trees for economic production. In contrast, "non-industrial private forest landowners" describes a diverse group of people who own forested property with the potential to grow timber. While many non-industrial owners appreciate their forest land for a variety of reasons, few realize its income potential. Most do not place a dollar value on their trees until a logger makes an offer.

Non-industrial private landowners hold 58 percent of timberland in the U.S.. Three-fourths of the timberland east of the Great Plains is owned by relatively small landowners (two-thirds have 100 or fewer acres). On a national scale, non-industrial private forests significantly contribute to U.S. wood products supply (Jones 1994). They are expected to continue providing about 75 percent of the national hardwood, round wood and sawtimber supply (Martin and Bliss 1989).

Private landowners have, however, generally been ignored as wood producers by foresters and the timber industry. As the demand for wood products increases, many forestry professionals are recognizing the importance that private landowners have in supplying timber and non-timber forest products (Bliss 1989, Clawson 1979). Increasingly, foresters realize that to meet the demand for forest products tomorrow, private landowners must sustainably manage their forests today. This realization has spurred researchers to examine non-industrial forest management.

Why use the term Non-Industrial Private Forest Owners?

One way forest land is classified is by ownership as defined below. This classification system does not indicate how the forest is managed, nor does it describe the ecological forest type. All of the ownership classes may be managed for a variety of products, habitats or benefits.

Forest Industry Land — Lands owned by companies or individuals that operate wood processing facilities (primary or secondary processing)

National Forest Land — Federal lands legally designated as national forests and administered by the U.S.D.A.

Other Federal Forests — Federal lands other than those managed by the U.S.D.A., such as those managed by the Bureau of Land Management or those on a Reservation

Non-Industrial Private Forest Land —Timberland privately owned by individuals without the means to process the wood (Rosson et al 1995)

There are no known trends in how non-industrial private forest landowners manage their land, only that very few do (Jones 1994). In the Ozarks, private landowners own three-fourths of the timberland. Only one landowner in 10, however, practices forest management (Greene and Duff 1991). The majority (59 percent) of residents have no plans to sell their trees (Williams and Kluender 1997) and may not feel the need to manage their tracts. These residents live in the Ozarks for the natural beauty and do not depend on income from timber harvests (Williams and Kluender 1997).

For the rest of the landowners, forest management has not been a priority. Until recently, the timber in this region was thought to be of low quality and not worth managing in such small tracts. In the past few years, reduced supply and heightened demand for hardwood timber have increased the price. Forest management is now economically worthwhile for small landowners.

Marketing timber in the Ozarks is a problem for private landowners who, not knowing timber prices, are vulnerable and often sell timber by the acre. A logger/buyer will offer a flat fee for a tract of timber. Usually, the owner has no idea of what quality the trees are, how much timber will be harvested, or real value. Moreover, few landowners know where to find services available to assist them in selling their timber. In most instances, the landowner is at the mercy of the buyer.

Loggers often “mine” the forest by taking the best and leaving the rest, a practice referred to as “high grading.” Inferior trees are left to produce seed for the next generation of trees. After several generations, the forest becomes increasingly degraded. The majority of privately owned Ozark forests are overstocked with small trees that are of low quality and of inferior species. As a result, the ecosystem of the Ozarks hardwood forests is changing, according to some forestry experts, from an oak- to a hickory-dominated forest. Good quality hardwood is more and more difficult to find.

The non-industrial private landowner plays an increasingly important role as a steward of natural resources. Many make decisions based on poor information and once cut, there are few options until the trees grow back — 30 to 100 years later. These decisions contribute to a decline of quality timber today and will do so in the future.

Landowners need to know their options so they can make educated decisions about managing and harvesting timber. Few people see trees as an investment. Changing landowner perceptions and practices may not be easy since many of the forests that exist today grew without conscious effort. Three-fourths of southern forests have regenerated naturally (Larson 1990). Trees can sprout without being planted by hand, and forests can grow without being managed. In fact, most landowners probably never planted trees to create their forests — they just grew. Few people are willing to invest time and money into a stand of trees when they grow naturally.

Active management of these small forest plots can bring substantial benefits to the landowners, the timber industry and the state's economy. Management of woodland areas can enhance wildlife habitat and/or the quality of timber on which wood manufacturers and rural industries depend. A study in Pennsylvania showed that even non-industrial private forest owners felt that education was the best strategy to promote forest management (Jones 1994).

Approaches Taken to Educate Landowners in Arkansas

The ultimate goal of this project was to educate private landowners about the value of their timber to promote sustainable forestry management. Winrock used a two-tier approach to achieve this goal. First, Winrock established a Working Group consisting of different organizations that had an interest in sustaining Arkansas forests or that worked with landowners. This included a formal partnership of three non-profit organizations based in Arkansas: The Nature Conservancy – Arkansas Field Office, the Arkansas Land & Farm Development Corporation, and the Ozark Foothills Resource Conservation and Development Council. The Working Group consisted of the partners, state, federal and private organizations.

Demonstration forest at the ALFDC, Brinkley, Arkansas

The second tier was to educate the landowners through a variety of activities. The Working Group designed educational materials, organized workshops and conducted landowner site assessments. In addition, two of the partners, the Arkansas Land & Farm Development Corporation (ALFDC) and the Ozark Foothills Resource Conservation and Development Council (RC&D), conducted specific activities in their respective areas. The ALFDC created a demonstration forest and taught farmers how to raise Shiitake mushrooms as an alternative income source to timber. The RC&D formed a woodland owners' association that is an independent entity working to educate and assist landowners.

Collaborating with Agencies and Organizations

Partners

How much is a tree worth? These signs showed visitors to the ALFDC demonstration forest the value of specific trees.

The Nature Conservancy, Arkansas Field Office (TNC) is a state field office of the national organization. It is well known throughout the state. Its mission is to preserve plants, animals, and other natural communities that represent the diversity of life on earth by protecting the lands and waters they need to survive. This effort tied into TNC's "Big Woods" of Arkansas project, where it is working to conserve, restore, expand and connect the bottomland wetland forests that currently exist in the Delta. The Nature Conservancy has been encouraging landowners to plant native bottomland hardwood trees on marginal farmland and to sustainably use existing forests in the Delta. TNC was instrumental in planning and implementing activities in this project, as well as providing expertise on environmental issues.

The Arkansas Land & Farm Development Corporation (ALFDC), founded in 1980, works closely with minority and limited-resource farmers. It was originally established to "stop and reverse the conditions leading to land loss among Arkansas' black farmers." In 1992, the ALFDC expanded its mission to improve quality of life in rural Arkansas (Schwartz 1993) which included addressing issues dealing with youth and non-agricultural businesses. Working closely with its members, the ALFDC provides technical assistance, training, access to land and financing, and encourages entrepreneurial development by identifying markets for high-value agricultural products that can be produced locally. The organization holds field days and has worked with over 900 landowners/farmers. Its established relationship with landowners in the Delta provided an educational forum for sustainable forestry management.

The Ozark Foothills Resource, Conservation and Development Council (RC&D), a nonprofit organization based in Batesville, works in the surrounding 12 counties on conservation, forestry and development issues. It is part of a national program bringing people together to solve human, economic and environmental problems in their own communities. The RC&D works with community members, industry and small business to promote sustainable use of resources. It works closely with the Natural Resources Conservation Service.

These partners represented a conservation group and two regionally based organizations who work with farmers and landowners. In addition to their participation in the Working Group, The Nature Conservancy planned and facilitated the Working Group and both the ALFDC and the RC&D conducted independent activities in the Ozark Foothills and the Delta.

The Working Group

Winrock formed an interdisciplinary Working Group to design and conduct the specific activities of the project. This Working Group represented all major agencies working with forestry or landowners and involved a broad range of perspectives in addressing sustainable forestry management and promoting interagency cooperation. The group consisted of the partners, the Arkansas Cooperative Extension Service, the Arkansas Forestry Commission, the Natural Resource Conservation Service, the Arkansas Forestry Association, Arkansas Forest Resource Center and private consulting foresters. Members researched, debated, and planned the activities and helped design a landowner education program.

The collective experiences and diverse perspectives of the different organizations strengthened the Working Group. Professionals based in the counties provided great insight into farmer and landowner needs and suggested successful ways to approach them. By involving practitioners of various organizations, the activities were effective and this project enhanced the agencies' ability to provide forestry information to landowners.

The University of Arkansas Cooperative Extension Service, based in Little Rock, serves as the informational arm of the Division of Agriculture, University of Arkansas system. Program leaders, state specialists and county agents provide research-based information to farmers, youth and others at the county and state level. Currently, two state forestry specialists are responsible for developing, supporting and delivering forestry programs through Arkansas. Historically, forestry programs have not been a chief program of the Cooperative Extension Service as compared to agriculture, but the forestry and natural resource program is growing.

The Arkansas Forestry Commission (AFC) was established in the 1930's to help control and prevent forest fires. Since then, the Commission has taken an active role in supporting and enhancing forestry-related economic development opportunities. Its services include advice and technical assistance on forest management, regeneration, fee-based and marketing. In addition to its free services AFC also provides technical services such as timber marketing, tree planting and prescribed burning. Commission foresters cannot sell timber, but they can provide limited marketing and volume estimation services and information on potential buyers, sales agreements, etc.

The Natural Resources Conservation Service (NRCS) is the federal agency formerly known as the Soil and Conservation Service. The NRCS, with offices in each county, works with landowners and farmers to promote conservation, and the wise use of soil, water and other natural resources. They work directly with farmers to develop soil erosion control strategies in their farming practices.

The Arkansas Forestry Association (AFA), a nonprofit organization representing forest-related interests, is composed of foresters, forest products companies, timberland owners, loggers, sawmill operators, and others who work in the forest industry in Arkansas. Its goal is to educate the general public and leaders about forestry concerns and opportunities in Arkansas.

Arkansas Forest Resources Center works closely with the University of Arkansas at Monticello School of Forest Resources, and the University of Arkansas Cooperative Extension Services to integrate teaching, research, and extension programs. Their goal is to enhance all forest resources, ensuring a balance between productivity and environmental benefits. Based at the Monticello campus, The Forest Resource Center is one of eight centers of excellence within the university system. Faculty of the School of Forest Resources associated with the Center were actively involved in designing workshops and extension materials for this project.

In addition to these organizations, private forestry consultants also were involved in the Working Group. These consultants work with landowners to develop management plans and to facilitate timber sales.

Landowner Education Activities

General Activities

The Working Group planned project activities and determined the kind of information landowners needed. They focused on two questions: (1) what information would be useful for landowners, and (2) what would be the most effective methods to convey this information? The Working Group developed informational fact sheets, conducted workshops and site assessments to demonstrate the value of timber and options for management and harvesting.

Fact Sheets

Several Group members researched and reviewed existing educational materials on hardwood forest management. They found a plethora of material but much of it was very technical in explaining forest management techniques and would likely not attract the attention of the average reader. For this reason, the Group developed two simple, single-page fact sheets that focused on the economics of forest management. These were titled *Top Dollar for Your Timber* and *Tree$ for Wildlife* (See pages 30-33 for examples).

Top Dollar for Your Timber describes the economical value of timber. *Tree$ for Wildlife* reviews basic techniques for managing forests for wildlife and associated economic opportunities. It includes very basic technical information and describes the services available from the various local agencies. Both information pieces are simple and brief. As one person pointed out, it is an "informative method for advertising services."

Workshops

The information was conveyed to landowners through *Top Dollar for Your Timber* workshops. The Working Group learned to attract landowners by advertising how they could get more money from their timber now and in the future. Half-day workshops were held that culminated in a free lunch. Workshops also addressed the problems growing from indiscriminate timber cutting. The fact sheets supported the workshops by describing the importance of seeking professional forestry advice to get full market value for the timber and by identifying trees that should be retained or regenerated with high future value (See Agenda, pg. 23). Seven workshops were replicated in seven different counties, in both the Delta and the Ozark Foothills. All followed the same format.

The workshops represented a truly cooperative and successful effort of government and nongovernmental organizations working together. The Nature Conservancy and Winrock International planned and implemented the workshops. Each featured three speakers: a private consultant, a representative of the research and extension community, and a representative from the Arkansas Forestry Commission. A representative from the NRCS and/or the RC&D facilitated a subsequent question-and-answer period.

Success of these activities has been measured by the increase in requests for assistance in counties where workshops were held. Information spread by word of mouth, as proven by requests for information from people who did not attend a workshop. The NRCS, RC&D and the Arkansas Forestry Commission all reported an increase in callers requesting information.

Interagency communication improved as well. Organizational representatives noted that they learned about activities of other agencies in their county. A representative from the NRCS commented that he felt more comfortable referring clients to the Arkansas Forestry Commission now that he understood the services it offered.

The simplicity of the *Top Dollar for Your Timber* workshop offers an easily replicated model. One Arkansas Forestry Commission forester noted how he gives the *Top Dollar* talk when he speaks to the Lions Club, schools and to other community groups. The president of the Arkansas Forestry Association reported that a few components from the *Top Dollar* groups are incorporated in landowner clinics it sponsors. The Arkansas Cooperative Extension Service presented the workshop independently in another area of Arkansas and a NRCS district conservationist from Louisiana adapted the workshop. Partner organizations reported requests to learn about the program from three states.

The popularity of these workshops prompted the production of a video entitled *Top Dollar for Your Trees*. Produced by the Forest Resource Center/University of Arkansas at Monticello and a private forestry consultant. The Arkansas Cooperative Extension Service distributes the video. Extension agents who were not involved in the workshops viewed the video, and the positive response was overwhelming. As a result, the Extension Service is producing copies for every county in Arkansas along with brochures and information packets. This model has proven to be an easy tool to enhance the information of county extension agents and make them feel a part of a successful initiative.

Site Assessments

To complement the workshop's message, forest-site assessments were conducted on private forest tracts to provide on-the-ground examples of potential, current and long-term timber values. The Working Group hired consulting foresters to assess the timber tracts of nine landowners in the Delta and 15 landowners in the Ozark Foothills. Landowners were chosen based on their willingness to implement a management plan and allow their forests to be used as demonstration sites. From these assessments, landowners learned about the value of their timber, harvesting options and management techniques. The Working Group supported this approach because it felt owners were more likely to learn from local friends, relatives and neighbors, than from outsiders. A landowner who knows that sustainable timber management can increase earnings will likely tell others who, in turn, can seek the advice and assistance of a forester. The private forestry consultants involved reminded landowners what services they could obtain free from the NRCS and Arkansas Forestry Commission, and what additional services were available from private consulting foresters.

Assessing timber value in the Delta

Several foresters working with the NRCS, the Arkansas Cooperative Extension Service and the Arkansas Forestry Commission felt these assessments were very useful because landowners became extension agents themselves, sharing information about the benefits of using a professional forester in forest management and timber marketing.

Lessons Learned from the General Activities

Winrock and its partners learned several key lessons from this project. First, the diverse backgrounds and insights of individuals from different agencies and the private sector who made up the Working Group was a great asset. For example, when developing the fact sheets, some individuals wanted to write technical brochures on forest management. One county-level professional strongly argued that no one would read it, and promoted the idea of a simple fact sheet that would provide landowners with information on how and where to get professional advice.

The initial workshops were not successful. They were publicized as "Sustainable Forestry Workshops" and few landowners attended. Although they were all day events, most of the landowners did not return after lunch. The program was long, predominately technical, often dealt in generalities and did not hold landowner's attention. Lack of landowner interest convinced the Group that it should switch to a sharp focus on ways to increase immediate forest income. The Working Group selected *Top Dollar for Your Timber* as the theme and came up with a concise agenda on timber values and timber marketing. The workshops were trimmed down to two to three hours in the morning, with lunch the final activity. The nonstructured lunch hour allowed participants to ask questions and meet the members of the Working Group.

The site assessments proved to be useful and the investment in hiring a forester clearly pays off. After the initial assessment, seven landowners hired the professional forestry to assist in marketing timber for sale. As a group, they increased their potential net earnings from 15-31 percent, even after the consultant was paid. In all but one case, the landowner cut less timber.

Area Specific Activities

In addition to the workshop and site assessments, the ALFDC and the RC&D conducted other activities in the Delta and the Ozark Foothills respectively.

The Delta

The Arkansas Land & Farm Development Corporation owns forest land and felt that many of the farmers who frequent its center would benefit from seeing the actual value of trees and how they can be managed for timber and for wildlife. The Corporation already had agriculture demonstration sites, but had not managed its 118 acres of forest land. Since this project started, the ALFDC has established an initial demonstration forest, showing prices of particular trees and species, and some 250 people have toured the sites. In 1997 it took the next step and designated three distinct managed components: red oak, pine and cypress slough based on the different ecosystems. Over the next year the ALFDC will make additional improvements to sustainably manage the forest tracts.

The ALFDC actively promotes development of non-timber forest products as an alternative to cutting timber. Shiitake mushrooms, initially popular in specialty stores and now common in grocery stores, are quite profitable. Shiitakes have high-value crop potential since they retail at much higher prices than typical button mushrooms. There are three markets for Shiitake mushrooms: fresh, dried and "grown your own kits." The kits, often seen in mail-order magazines, are simply inoculated logs ready to produce. Shiitake spores need to be inoculated into 4-inch hardwood logs (white oak being superior) and incubate for approximately six months. The ALFDC has more than 1,000 logs

inoculated and is conducting a market survey to identify the most appropriate form of and market for the Shiitake mushrooms. Once identified, The ALFDC will conduct additional training sessions and establish a growers' cooperative.

Lessons Learned from Activities in the Delta

The project benefited from the ALFDC 's long-standing relationship with Delta farmers to introduce forest management. Many farmers and residents, who already use the ALFDC's services, were exposed to the potential value of and need to manage their forest land. However, the problem in the Delta is much different from that in the Ozark Foothills. The Delta has been extensively deforested, and a greater emphasis needs to be placed on reforestation as an investment for landowners.

The Ozark Foothills

The approach used to educate landowners in the Ozark Foothills was to form a forest landowners' association with the assistance of the Ozark Foothills Resource Conservation and Development Council. This association, named "The Ozark Woodland Owners Association," provides a forum where people in similar situations come together to learn how to manage their woodlands, how to access state and federal services, and to share problems and solutions.

Forming such an association was a straightforward process. Representatives from the county offices of the Arkansas Forestry Commission, the Arkansas Cooperative Extension Service, and the NRCS met with private landowners. A steering committee was formed to oversee the association's development. The steering committee used tax records to identify all landowners holding 20 or more acres of forest land. They developed a survey and sent it to these landowners to determine their interest in an association. Some 140 people responded positively and attended the first meeting. During this meeting, the landowners elected interim officers to develop a mission statement and bylaws.

The Ozark Woodland Owners Association's primary objective is to educate landowners on how to manage and market their timber. The association holds workshops and field days and publishes a member newsletter. Additionally, the association offered a limited number of free professional forest assessments.

In the three years since the association was formed, it conducted six workshops attracting nearly 300 participants, published eight newsletters, and produced a video on the basics of forest management that has been distributed to government agencies, libraries and schools. Fifteen landowners have had association-sponsored timber evaluations. The officers meet every other month to plan activities, many of which are collaborative with governmental agencies. Many of the landowners are retired, reflecting the large proportion of retirees in the total private forest owner population.

Lessons Learned from Activties in the Ozarks

The formation of the landowner association provides lessons for others who may want to replicate this process. It was important to involve professional foresters, conservationists and extension agents from the beginning. All successful efforts required the support of the various agencies and organizations. This has resulted in continued cooperation. For example, since the establishment of the woodland association, the Arkansas Forestry Association has coordinated efforts with the president and conducted workshops at association meetings. The association has learned about the perspective of landowners and the constraints placed on them. Meetings are held during week nights to ensure broader attendance, and kept short and to the point.

Conclusion

There were numerous lessons learned from this case study about behavior of non-industrial private forest landowners and effective ways to introduce new ideas to landowners. Non-industrial private forests are an important source of wood and landowners are key players in managing the state's ecosystem. The management or mismanagement of the cumulative forests owned by private landowners can greatly affect Arkansas' rivers, wildlife, tourism and timber supply.

Most owners of small forests in the target regions do not manage their tracts. Those that sell timber, rarely obtain professional advice before doing so. Not only do these owners fail to receive the top dollar for their timber, they tend to lose any future earning potential when the forest is cut without provisions for continuing growth or regeneration. Professional foresters, available through state agencies or private sources, can assist by helping prepare appropriate forest management plans, facilitating sales and recommending regeneration strategies where needed.

Teaching and informing a diverse group of forest landowners is a challenge and needs to be approached from several angles. In this case, the simple message — consult a professional forester before selling your timber — was the most important component of the program. It targeted a specific group of such owners — those who were about to sell their timber — and suggested a simple way to capture full market value in the transaction.

Short workshops are an effective way to spark interest. Like other public meetings, they need to be held when people can attend. This will vary depending on the target audience. In the Ozark Foothills, meetings on weekday nights attracted attendance of 80 or more. When working with farmers, meetings should be scheduled during off seasons. Regardless of when they are held, brief, to-the-point meetings were the most productive. Forest owners were, for the most part, more receptive and trusting of local presenters who represented organizations with which they had previously worked, than they were of outside experts.

Showing is more effective than telling. The site assessments, field days, and tours of demonstration forests were excellent complements to the indoor workshops. Site assessments gave landowners an on-the-spot, firsthand look and information about the value of local forests. The stark contrasts between initial bids received and those following a forester's assessment and competitive bidding carried the message home.

When land is available, demonstration forests are effective for showcasing various options. They are an important tool for teaching landowners how forests can be managed for a variety of uses and value including: timber, wildlife and watershed management. Parts of the forest can show different stages of the development and management practices such as regeneration, thinning, harvest and specific intervals in-between. Easy access and high visibility can attract a wide range of people to a demonstration forest including those who may use it for hiking and other outdoor recreation. Interpretive signs explaining species, treatments and wildlife enhance the impact of the forest and the experience for the visitors.

Strengthening the capacity of professionals who already work with landowners was a successful component of this project. Inclusion of all agencies involved from the beginning was the key here. It was important to include people from state, as well as county office levels. The *Top Dollar* program is now their program, and they feel ownership in the concept. It is now being incorporated into service agencies' programs and these agencies continue to work together to educate landowners about forestry. The county-level professionals who work for the NRCS, the Cooperative Extension, and the AFC will be the individuals who will be carrying the program forward.

Finally, initial results indicate that individual landowners in this pilot project who had their timber assessed, may manage their forests over the long term. We believe the values identified were both surprising and encouraging to them.

Continuing Concerns

The ecological state of Arkansas is everyone's concern. This project focused on one aspect — trying to improve the quality of hardwood forests by educating landowners about the potential value of their timber. Yet there are other concerns facing owners of small hardwood tracts.

The number one concern of professionals in this field continues to be landowner education. Workshops need to continue in the counties where the project took place. Landowners who were not reached through the media campaignneed to be informed. Working with churches, schools and other community-based organizations may be an effective method to reach and inform a greater audience. Absentee landowners need to be informed via direct mailings.

Other professionals throughout the state need to be trained in the *Top Dollar* approach. Already organizations see the importance of this program and the Arkansas Cooperative Extension Service will be training their county extension agents statewide on this initiative.

Landowners also need information to make the best decisions on land use. As timber prices rise, some landowners may make more money by converting agriculture land to forests. A recent study conducted by Virginia Polytechnic Institute (VPI) (Amacher et al. 1997) developed a complex model to compare the economic returns of reforestation scenarios with soybean production on Delta lands. They targeted economically marginal land that was prone to frequent flooding and was more environmentally sensitive given its wetlands' condition. The study focused on the Lower Mississippi Alluvial Valley in Arkansas, Louisiana and Mississippi, and VPI documented findings in a report entitled, "Reforestation of Farmland in the Mississippi River Delta: A Landowner Level Economic Analysis."

The results indicated that, on a net present-worth basis, there is no significant economic advantage from using marginal land for agriculture over timber production, i.e., reforestation is competitive with soybean production on these marginal lands. The report noted that there would be additional value associated with the reforestation options through societal, environmental and aesthetic benefits that were not considered in the study.

However, under current conditions, reforestation is not competitive with soybean production on a

risk-adjusted basis. That is, when economists factor risk into growing trees to calculate net present value, trees are not as profitable as soybeans. The VPI team concluded that new government policies and incentive programs are needed to offset risks and stimulate landowners to convert marginal bean lands into hardwood forests.

As landowners become more involved with growing trees, other concerns may arise. Certain tax structures may be a disincentive for people to grow and sell timber. Research needs to be conducted to see how tax laws and policies may positively influence landowners to sustainably manage their forests.

Timber theft is an increasing concern of those who hold valuable timber. This is especially important when non-industrial private landowners are involved in timber sale and harvest without professional assistance They may not realize the importance of being present or requiring a strong contract to ensure that the logger operates under fair practices.

There is concern about forests being over-regulated, where landowners need to seek cutting permits prior to harvesting. There are pros and cons with such regulation. On one hand, it could create a thick bureaucracy and a challenge for private landowners to sell what is rightfully theirs. On the other hand, it may ensure that landowners hire a professional, write a management plan and create a sustainable management plan. Policies need to be carefully thought out and policy makers need to consider the unintended consequences of the regulation.

Most timber produced in the South is pine. Consequently, most forestry students are being trained in pine forest management. Hardwood forest management is not as straightforward as pine forest management, and multi-species, naturally established forests are more difficult to manage than tree plantations. There may be a need for forestry schools to train more students in hardwood forest management.In some areas of the state, there is a stark shortage of private consulting foresters who can help people manage their timberland.

The final issue is understanding how new markets for forest products impact the landscape. Arkansas forest industries are responding to the higher global demand for paper. Two hardwood pulp chip export mills have recently been established in Arkansas and a third planned. These are primary processing plants that buy, harvest, debark and process any and all species of hardwoods (except hickories) into raw chips for export via river barge and ocean freighter to Japan for manufacture into paper and paper products. They can use trees as small as 5" in trunk diameter at breast height and use rough and rotten trees not suitable for sawtimber.

Some groups are concerned that the influx of chip mills may encourage indiscriminate clear-cutting. Environmentalists are concerned that the demand for hardwood forests exceeds the supply.

However, findings in a study by Gray and Guldin (1997) project that loss of hardwood forests, due to increased harvesting to meet the new sector's raw wood requirement, would be relatively minor. Based on their assumption, the surplus hardwood of non-industrial private forests would be more than adequate to meet the needs of the three mills if it were all available. Yet as much as 20 percent of the supply might not be available for purchase — it lies in the hands of owners who are not willing to sell at any price. If this is true, then surplus growth will just barely equal the new demand today and may fall short in the near future.

No one has reached a well-informed consensus on the effect of these chip mills on the Arkansas landscape. The issue needs to be closely monitored. Unless the increased hardwood harvesting is done sustainably, both the forest resources and some segments of the hardwood-based forest industry may lose.

Hardwood forests are a valuable resource for Arkansas and need to be managed for the good of the people today and for future generations. Education is the best method to inform landowners of their options — managing for timber, wildlife or aesthetics for the long term. The impact of how individuals manage their land can have far-reaching consequences for the state's economy and the state's future.

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List of People Interviewed

Chris Barneycastle
President
Arkansas Forestry Association
Little Rock, Arkansas

Jim Barnett
President
Ozark Woodlands Association
Batesville, Arkansas

Douglas Butts
Project Coordinator
Ozark Foothills Resource Conservation and Development Council
Batesville, Arkansas

Margie Cannon
University of Arkansas Cooperative Extension Service
St. Francis County
Forrest City, Arkansas

Doug McClellan
Natural Resources Conservation Service
Woodruff County
Augusta, Arkansas

Levelle Foote
County Agent
Natural Resources Conservation Service
Lee County
Marianna, Arkansas

Dr. John Gray
Private Consultant/Actor
Little Rock, Arkansas

Brian Hebert
Private Consultant
Professional Consulting Services
El Dorado, Ark

Tom Jessup
Farm Advisor
Arkansas Land and Farm Development Corporation
Brinkley, Arkansas

Tom Riley
University of Arkansas Cooperative Extension Service
Little Rock, Arkansas

Leslee Spraggins
Project Manager
The Nature Conservancy, Arkansas Field Office
Little Rock, Arkansas

Bryant Stephens
Project Coordinator
Arkansas Land and Farm Development Corporation
Brinkley, Arkansas

Dr. Tamara Walkingstick
Forester
University of Arkansas Cooperative Extension Service
Monticello, Arkansas

Dr. Rick Williams
Assistant Professor
School of Forest Resources
Arkansas Forest Resource Center
University of Arkansas, Monticello
Monticello, Arkansas

Jim Wimberly
Foundation for Organic Resource Management
Fayetteville, Arkansas

Nancy Young
Forester
Natural Resources Conservation Service, State Office
Little Rock, Arkansas

Bob Zielinske
District Forester
Arkansas Forestry Commission
Forrest City, Arkansas

Appendix

How to Put on a Top Dollar Workshop

Top Dollar for Your Timber workshops are easily replicated, and materials developed for the workshops in Arkansas can be adapted to other areas. People interested in developing a landowner education workshop may use this "kit."

Before using these materials, it is important to involve all the different groups: forestry commission, NRCS, Cooperative Extension agents and other organizations that work with landowners or forestry issues. As indicated in the case study, involvement of the various groups from the beginning is essential to the long-term success of the program. It may be important to initially meet with those involved at the state level, before working in individual counties or districts. We found county-level professionals — those who knew the landowners — to be effective speakers at the workshop. Once the various organizations are committed to the workshop, the events need to be planned. There are four basic steps involved in the process:

1. Meet with local District Conservationists and Cooperative Extension agents
   Decide on date, location, speakers, agenda, food
2. Mail letters to forest landowners
3. Publicize (radio, newspaper, calendars, post/distribute agendas)
4. Hold meeting. Follow-up may include consultant site assessments to several private landowners.

The materials that follow assist in the planning of the activities after the different participating agencies are interested. The different components include:

- Planning Schedule
- Advertising Examples
- Fact Sheets

Planning Schedule

The planning schedule provides a time line describing what needs to be done when. This schedule lists the activities (meetings, advertising, etc.) and provides a framework for the workshop planning. From this list, it is easy to identify budget costs for your particular area. The checklist format enables the workshop planners to make sure all steps are completed to produce a successful workshop.

Be sure to be sensitive to the time constraints of your audience. If most of the woodland landowners are farmers, plan so that the workshop takes place in the off season. We found weekday evenings to be successful.

Attachments

Several attachments are useful for this workshop. These include the agenda, advertising information, radio announcements and the fact sheets. Examples of these are presented in this section. To use them for your workshop, be sure to change the time, date and place for your event and the information about those who are sponsoring the event.

Two different fact sheets were developed for this program. These were used as flyers (pre-workshop advertising) and as handouts for the workshops. They provide very basic technical information and contact information of available services. The Fact Sheets presented here are in two pages, and represent the front and back sides.

In most areas, these two fact sheets are ready to use. Be sure to change the contact information for the government services available in the area of the workshop. You may need to identify the available programs in the target area.

Planning Schedule

A. Preliminaries — Approximately Two Months Ahead

_____ Cooperative Extension agents on board
_____ District conservationists on board
_____ Committee on board
_____ Speakers arranged
_____ Meeting space reserved
_____ Agenda prepared (See Attachment 1)

B. One Month Ahead

1. Public Relations

Letters

_____ Mailing house found
_____ Mailing labels
_____ Letters written (see Attachment 2)
_____ Letters signed
_____ Letters printed, folded, sealed

(mail two weeks before event)

Radio / TV

_____ Info written (see Attachments 3 and 4)
_____ Contact made
_____ Aired

Newspaper

_____ News release written (see Attachment 5)
_____ News release distributed
_____ Article published
_____ Reminder notice written, distributed
_____ Reminder published

Calendars / Flyers / Other

_____ Info prepared
_____ Info distributed

2. Meeting Space

_____ Room confirmed
_____ Set-up planned
(tables, chairs, food line, display tables)
_____ Help, day of meeting
(sign-in table with name tags)
_____ Audio/visual equipment available

3. Food

_____ Menu and price determined
_____ Caterer found
(price, number, tip, set-up, clean-up)
_____ Location discussed with caterer

C. One Week Before

_____ Prepare Detailed Agenda (see Attachment 6)
_____ Go over with group

D. Three Days Before

_____ Estimate numbers (caterer, handouts, chairs)
_____ Invite media

E. Two Days Before

_____ Make copies of information, sign-in sheets (Fact Sheets Attachments 7 and 8)

F. One Day Before

_____ Set-up room
_____ Set-up (and check) equipment

G. THE DAY!

ARRIVE EARLY

TEST EQUIPMENT — Lights, Sound, Projector, Screen

MEET CATERER

HELP SET UP DISPLAYS

MEET HOSTS

H. After the Meeting

Clean up! — Get help!

Attachment 1 — Agenda (also used as a flyer)

Put Woodland Management to Work for You

Top Dollar for Your Timber

Join Us for a <u>FREE</u> Lunch After the Meeting!

Wednesday, **March 12,** 1997
10 a.m. to Noon
U.S.D.A. Fish Farm Experiment Station
Nine miles east of **Stuttgart** on Hwy. 130 East

10:00-10:15	**Welcome and Introductions** Cooperative Extension Service — Phil Sims, Mitch Crow, Kevin Lawson
10:15-10:35	**How Much Are your Trees Worth?** Brian Hebert, Professional Forestry Consultants
10:35-10:55	**Growing and Selling Timber for Top Dollar** Frank Roth, Southwest Research Experiment Station
10:55-11:15	**Where to Get Help with Forest Management** Bob Zielinske, Arkansas Forestry Commission
11:15-11:30	**Closing and Sign-ups** Natural Resource Conservation Service — Steve Jacks, Dennis Jones, Joe Moore
11:45	**Lunch**

This workshop is open to all persons, regardless of race, color, national origin, religion, sex, marital status, age or disability.

Sponsors

<u>U.S.D.A.-NRCS</u>	<u>Cooperative Extension</u>	<u>Others</u>
Arkansas County, 946-4357	Arkansas Co., 673-6111 and 946-3061	Arkansas Forestry Commission, 633-6693
Lonoke County, 676-2176	Lonoke County, 676-3124	Arkansas Land & Farm Dev. Corp., 734-1140
Monroe County, 747-3431	Monroe County, 747-3397	Ozark Foothills RC&D, 793-6550
Phillips County, 338-3881	Phillips County, 338-6474 (x149)	The Nature Conservancy, 663-6699
Prairie County, 256-4323	Prairie County, 998-2614	Winrock International, 727-5435

Attachment 2 — Letter

Put Woodland Management to Work for You

Top Dollar for Your Timber

February 20, 1997

Dear Forest Landowners in Jackson, White and Woodruff counties:

You are invited to a tri-county **workshop** to be held in **Augusta** on **Friday, March 7,** entitled **"Top Dollar for Your Timber."**

The meeting starts at **10 a.m. at the Laura Conner Complex** on Highway 33B at Sycamore Street, and lasts until noon. The workshop will be followed by a **FREE B-B-Q lunch**. The schedule:

10:00-10:15	Welcome and Introductions
10:15-10:35	How Much Are your Trees Worth?
10:35-10:55	Growing and Selling Timber for Top Dollar
10:55-11:15	Where to Get Help with Forest Management
11:15-11:30	Closing, Questions

You deserve a high return from your forests, and active management can make a big financial difference! **Professional foresters will be there to help you decide what to do with your timber stand.**

We hope to see you there!

Sincerely yours,

The "Top Dollar" Planning Committee

Arkansas Forestry Commission, 633-6693
Arkansas Land & Farm Development Corporation, 734-1140
Jackson County Cooperative Extension Service, 523-7451
Jackson County Natural Resource Conservation Service, 523-2201
Ozark Foothills RC&D, 793-6550
The Nature Conservancy, 663-6699
White County Cooperative Extension Service, 268-5394
White County Natural Resource Conservation Service, 268-5866
Winrock International, 727-5435
Woodruff County Cooperative Extension Service, 347-2556
Woodruff County Natural Resource Conservation Service, 347-2362

This workshop is open to all persons, regardless of race, color, national origin, religion, sex, marital status, age or disability.

Attachment 3

Top Dollar for Your Timber
One minute **Radio Spot**
to run Feb. 25-March 11, 1997

ANNOUNCER:

Hey landowners,

Are you neglecting your trees?
Not in your yard, but down on the farm — especially those bottomland hardwoods.

Did you know you can double their growth and value with the help of a professional forester? Hundreds … even thousands more dollars can be yours at sale time with wise forest management.

Mark your calendar now for Wednesday, March 12.
And make plans to attend "Top Dollar for Your Timber" at the Fish Farm Experiment Station, nine miles east of Stuttgart on Highway 130. You'll learn how forest management can bring big rewards and where to find the help you need.

"Top Dollar for Your Timber" is a FREE presentation that begins at 10 a.m. … followed by a FREE lunch.

Don't miss out. Learn how forest management is a high profit plan that will work for you.

Top Dollar for Your Timber
Wednesday, March 12, at 10 a.m.
U.S.D.A.'s Fish Farm Experiment Station (next to the rice research center)
Nine miles east of Stuttgart on Highway 130

"Top Dollar for Your Timber" is sponsored by the Natural Resource Conservation Service and Cooperative Extension Service offices in Arkansas, Lonoke, Monroe, Phillips and Prairie counties.

Attachment 4

Top Dollar for Your Timber — March 12 — Stuttgart

Talking Points for Radio Show

Speakers' Names:_____

- **Bottomland hardwood stands,** which are often treated as nothing more than drainage areas between fields, **can provide significant income opportunities for landowners.**
- **Management** of a hardwood stand can increase earnings from timber sales by 100% or more.
- Many landowners wait until a time of need or crisis — such as college education, health care emergency, retirement supplement — to think about making money from their bottomland hardwood stands. By then, they have missed the opportunity to optimize their returns from their wood lots.
- No one would consider not managing their **FARM** lands for top returns. Why should **woodlands** be any different?
- Because many landowners only go to their wood lot "accounts" for cash once or twice a lifetime, they don't learn the basics of woodland management. Professional foresters can provide management guidance, and their services often pay for themselves many times over — possibly every 10 years instead of every 50 years.
- Red oaks (such as cherry bark, Nuttall and water oak), white oaks (such as overcup and swamp chestnut oak), green ash and cypress all have fair to good timber markets, and they grow in low-lying areas.
- Oak trees have both good markets and high wildlife value.
- The **sawtimber market yields** several times more per tree than pulp, paper and cross-tie markets. Trees that grow straight and have few branches near the bottom of the trunk are far more valuable than "wolf trees" which branch in many directions close to the ground.
- Hardwood timber has stayed ahead of inflation in market value over the past couple of decades. The price of hardwood timber has continued to grow rapidly, assuring that a timber stand can be a relatively safe investment.
- Some marginally productive farm lands will produce more money in trees than in row crops, and for much less effort. The Wetland Reserve Program, Conservation Reserve Program and Forestry Incentive Program can help landowners with the cost of reforesting on some lands. Many of our listeners already know about these programs, but they've changed with the new farm bill. Call for details if you don't know about the current status of our conservation programs.
- A good management plan will show where there are environmental, geographic or hydrological features which could limit timber production, and therefore are best suited to non-timber uses. We've been experimenting with mushroom production, development of hunting leases and similar recreational uses on those lands that are too fragile for timber production.

Attachment 4 (page 2 of 2)

Top $, Stuttgart, 3/12/97
Radio Talking Points

- A forest evaluation can be done by a private consulting forester for only a few hundred dollars, and it could raise your long-term profits by several thousand dollars. The Arkansas Forestry Commission can provide this service at no cost for many landowners.

- "Top Dollar for Your Timber" will be held at the U.S.D.A.'s Fish Farm Experiment Station, nine miles east of Stuttgart on Highway 130 (located next to the rice research center) from 10 a.m. to noon on Wednesday, March 12. The U.S.DA/NRCS, Cooperative Extension Service, Arkansas Forestry Commission, Arkansas Land & Farm Development Corporation, The Nature Conservancy, Winrock International, forest specialists, and private forestry consultants will be there to help you decide what to do with your hardwood stand.

- Depending on interest shown at the Top Dollar meeting, we may offer tours of successful forestry operations in the Delta; we'll see if there is interest in forming a landowner's association to examine ways forest landowners can work together to raise their profits; and we may be able to help several landowners with the cost of carrying out a woodland appraisal.

- There are many areas in the Delta where it will be economically and ecologically desirable to reforest the land. Come see us March 12 in Stuttgart.

Attachment 5 — Written News Release. Note: We did not use a traditional news release … may or may not need (we used the agenda).

Put Woodland Management to Work for You

Top Dollar for Your Timber

Where:	Stuttgart — at the Fish Farm Experiment Station Nine miles east of town on Highway 130
When:	Wednesday, March 12, 1997 10 a.m. to Noon
Why:	Because you deserve a high return from your forests, and active management can make a big financial difference!
Who:	All forest landowners, especially those with bottomland hardwoods. Representatives from U.S.D.A./NRCS, Arkansas Forestry Commission, Cooperative Extension Service, forest researchers and private consulting foresters will be there to help you decide what to do with your timber stand.

Attachment 6

Detailed Agenda

Welcome/Introductions — Cooperative Extension Service (agents divide responsibilities)

Welcome to Stuttgart! — Phil
Introductions
Landowners — raise hands (as a group) from individual counties
Private forestry professionals — stand, state name, company
Media, local dignitaries
Cooperative Extension reps — Tamara Walkingstick, others
Natural Resource Conservation Service — Nancy Young, others
Top $ Planning Committee (stand, those not already introduced, introduce self)
Meeting logistics
Rest rooms
Questions at end, and can visit with any of these people during lunch for personal questions
Leslee is the timekeeper

Introduce speakers, one at a time, as on program (meet them before meeting)

Brian Hebert (pronounced "A-Bear"), private forestry consultant from El Dorado
Frank Roth, Southwest Research & Extension Service
Bob Zielinske, Arkansas Forestry Commission

Closing / Questions / Sign-ups — Natural Resource Conservation Service (divide responsibilities)

Introduce selves

"Any questions?"

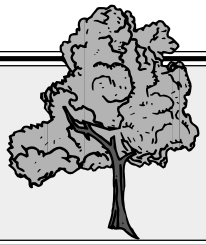
Fill in any information gaps

We expect to be able to hire a private consultant for a couple of landowners in each county.

Let the DC's know if you want your land to be considered.
We might want to use your property for a tour, so if we get a private consultant you must be willing to share the results.

Invite to eat! — Steve Jacks

Forestry Fact Sheet #1 (Side A)



$ TOP DOLLAR $ FOR YOUR TIMBER

Got a Big Tree? It might be worth $2, $20 or $200 sold where it stands! Timbered acres can be worth a lot of money — sometimes more than cropland. How much money depends on what you have and what buyers want.

Kind of Tree: Timber markets change. In the current marketplace, a forest of red oaks is worth more than a forest of post oaks. Green ash can be valuable. White oaks can bring top prices.

Size of Tree: Diameter (thickness) of the trunk at chest height is important — one oak that is 16-inches thick may be worth 23 oaks that are 8-inches thick. A 40-inch thick tree is even better — unless it's hollow in the middle (then squirrel hunting could be the highest value). Height matters. An 8-inch thick oak that is 60-feet tall is worth twice as much as an 8-inch thick oak that is 30-feet tall.

Quality of Tree: A "top dollar" tree is straight and tall and clear of branches on the lower trunk. A quality tree can contain several saw logs. Defects, such as knots and bends, reduce the number of quality logs.

Distance to Market: Buyers usually buy within a 90-mile radius of their mill, but will go farther depending on the kind, amount and quality of timber involved.

Timber Markets

$ Pulp or Chips — for smaller trees and low-quality larger trees

$$ Pallets and Cross Ties — for medium-sized trees. Higher value than pulp, but less than sawtimber (not the best market for top quality oaks)

$$$ Sawtimber — For trees with at least one log that is 16-feet long. Truck thickness at chest height usually runs from 12-40 inches. The small end of the top log must have a thickness of about 10 inches.

$$$$ Veneer — Brings highest price of all — generally top quality sawtimber-size trees (no scars or knots) for species in the highest demand (white oak, red oak, walnut, pecan, black cherry, etc.)

$$$$$

GET HELP! Selling timber is a big deal! Have a professional forester measure your trees and estimate their fair market value before you sell! Get help planning and managing for your future forest, too. If you have enough acres of the right trees, **you could be making money from timber sales every 5-10 years.**

Forestry Fact Sheet #1 (Side B)

Your trees are valuable! Call for help to get ...
$ Top Dollar for Your Timber $

<< INFORMATION SOURCES >>

Ask about sustainable forestry practices — continuous income from a permanent and healthy forest.

Arkansas Forestry Commission

Provides free forest management plans and sale recommendations, sample timber sale contract and a **listing of consultant foresters** and tree planters in your area. The Forestry Commission can selectively mark timber for sales, construct fire lanes and conduct controlled burns for a small fee. Tree seedlings are sold at Forestry Commission offices.

Check your local phone book for your county forester. Look under **Arkansas Forestry Commission,** or call the Little Rock office at 296-1940.

County Conservation District

Offers free landowner assistance (advice and money) for farm and forestry management. Every county has a district conservationist to provide help and a local board that establishes conservation priorities for that county. The Districts also sell tree seedlings.

Check your local phone book for your county's district conservationist. Look under **U.S. Government, Agriculture Department, Natural Resources Conservation Service,** or call the NRCS office in Little Rock at 324-5418, or the Arkansas Association of Conservation Districts in Little Rock at 682-2915.

$$$$$

Cooperative Extension Service

Helps answer farm, forestry and home management questions. Every county has a county agent and staff to provide help — such as timber market information, wildlife management, soil testing and financial management. The Cooperative Extension Services also employs forestry and wildlife specialists.

Check your local phone book for your county agent. Look for **Cooperative Extension under your county's name.** Or call the Little Rock office at 671-2000.

Forestry Consultants

Provides services for a fee, to help you plan, sell and manage for what **you** want from your forest. (Forestry plans can include wildlife and family heritage as well as timber income.) Private consultants work on a per day or per acre basis for services performed, or on a percentage of the sale price, like a real estate agent. This creates a real incentive in getting you "top dollar" for your timber. **Ask consultants for their references.**

Some forestry landowners in Arkansas participate in the "Tree Farm" program. For information call the **Arkansas Forestry Association** at 374-2441 (Little Rock) or toll free at 1-888-698-7337.

This fact sheet has been prepared by the following group of organizations: Arkansas Land & Farm Development Corporation, 734-1140; Ozark Foothills Resource Conservation and Development Council, 793-6550; The Nature Conservancy's Arkansas Field Office, 663-6699; and Winrock International, 727-5435; and funded by the United States Department of Agriculture (U.S.D.A.) under a Sustainable Agriculture and Research Education (SARE) grant. All programs and services of the U.S.D.A. are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, marital status, age or disability. 3/97

Forestry Fact Sheet #2 (Side A)

TREE$ and WILDLIFE

$$$ Trees Make Money. Your timber can bring your family several hundred dollars per acre every 10-15 years if you have the right trees. Get professional forestry help to get "Top Dollar for Your Timber!" (See Forestry Fact Sheet #1)

Trees Attract Wildlife. Your forest provides home to many birds and animals — from ducks and deer to hummingbirds and lizards. You may be able to lease your land for hunting deer and turkey ($1.-$3./acre) or ducks ($2,000-$5,000/blind). To attract wildlife save at least 10 "snags" (trees unusable for timber, such as hollowed or crooked or "limby" trees) per acre for wildlife. Keeping trees along streams benefits wildlife and your land — trees keep your soil from eroding and help keep the water clean.

9 **Variety is the Spice of Life.** Different animals need different things during different seasons. Good wildlife habitat provides water and a variety of foods and shelters.

Food: Many **tall** trees provide wildlife foods — oaks, hickory, beech, black gum, hackberry, black cherry and ash. Many **medium and small** trees produce fruit and seeds — such as persimmon, dogwood and hawthorn. **Dead** trees and fallen leaves are full of insects which many birds and animals require, especially in spring when young are born and protein needs are high. **Short** plants and vines are needed, too, such as blackberries, grasses and flowers.

Shelter: Space is needed for nesting and resting. Small holes and large holes in tall, medium, short and fallen trees are used by wildlife. Out-of-sight treetops, thick tangly shrubs and bushy grasses provide hiding places for various birds and animals. Some birds and animals prefer large areas of deep forest.

Habitats of Choice

Bear — eat plant foods, such as acorns, nuts and berries, and insects, fish and small mammals, like rats (dead or alive); use large cavity trees in deep woods to den.

Deer — eat many plant foods, need winter forage and thick cover for resting.

Ducks — need water for resting and feeding (different kinds of ducks feed at different depths); eat grains, seeds, roots, acorns, insects and crustaceans (like small crawdads) from mud; many ducks use bottomland hardwoods during the winter for resting.

Turkey — need open areas for mating displays; need deep forest for resting and feeding; need grassy areas for raising young.

Rabbits — need various kinds of grasses and bushes for feeding and hiding.

Songbirds — need grasses, flowers, vines, shrubs and trees of all sizes and kinds; quiet nesting areas in holes, thick bushes and tall trees.

Forestry Fact Sheet #2 (Side B)

Wildlife Needs Trees! Call for Help with your Forest ...

<< INFORMATION SOURCES >>

Ask about sustainable forestry practices — continuous income from a permanent, healthy, wildlife-filled forest.

Arkansas Game & Fish Commission

Operates state Wildlife Management Areas around the state. Provides free wildlife and forestry information. Offers financial help on certain types of wildlife habitat improvements. Check your local phone book under state government for the Game and Fish Commission, or call the Little Rock office at 501/223-6300.

Cooperative Extension Service

Helps answer farm, forestry and home management questions. Every county has a County Agent and staff to provide help on such things as timber markets, wildlife management and soil tests. Check your local phone book for Cooperative Extension under your county's name. Or call the Little Rock office at 501/671-2000.

County Conservation Districts

Offers free landowner assistance (advice and cost-sharing) for farm and forestry management. Every county has a District Conservationist and a local board. Check your phone book under U.S. Government, Agriculture Department, Natural Resources Conservation Service, or call the Little Rock office at 501/324-5418, or the Arkansas Association of Conservation Districts at 501/682-2915.

U.S. Fish & Wildlife Service

Operates National Wildlife Refuges around the state. Offers some technical and financial assistance. Call the Private Lands Office in Little Rock at 501/223-6392.

Arkansas Forestry Commission

Offers free forestry management plans, which can include wildlife, as well as timber values. Maintains a forestry consultant list. Check your local phone book or call Little Rock — 501/296-1940.

Arkansas Department of Parks & Tourism

Staff in the 52 state parks present over 24,000 programs each year on wildlife, habitat and conservation. Call 501/682-1191 for information.

Arkansas Natural Heritage Commission

Manages nature preserves around the state and keep a landowner registry for interested conservationists. Call 501/324-9150.

Private Organizations

The Nature Conservancy 501/663-6699; Ducks Unlimited 501/268-8223 or 870/282-3788; Arkansas Wildlife Federation 501/663-7255; Audubon Society (Central Arkansas) 501/225-5096; Arkansas Forestry Association 501/374-2441

This fact sheet has been prepared by the following group of organizations: Arkansas Land & Farm Development Corporation, 870/734-1140; Ozark Foothills Resource Conservation and Development Council, 870/793-6550; The Nature Conservancy's Arkansas Field Office, 501/663-6699; and Winrock International, 501/727-5435; and funded by the United States Department of Agriculture (U.S.D.A.) under a Sustainable Agriculture and Research Education (SARE) grant. All programs and services of the U.S.D.A. are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, marital status, age or disability.
9/97