

**A New Social Order: Changing U.S.
Agricultural Practices in the Lower Mississippi River Valley, 1945-2000
By
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In the early 1960's the pop song, "Detroit City, made the top forty record chart and became a national best seller. The lyrics recounted the life of an automobile worker slowly destroying himself in the monotony of assembly line work by day and barrooms of the motor city at night. In his lament he dreamed about his family and the cotton fields back home and concluded with sorrowful "lord I want to go home."¹

Detroit City, originally published as "I Wanna Go Home" became a musical success because thousands of former southners now living in industiral cities in the northern and western states readily identified with the singer's dilemma. Fleeing the monotonous, low wage agricultural work in southern cotton fields during and immediately following World War II, these exiles now found themselves trapped in the dehmanizing effects of assembly line work in manufacturing plants. The pay was better, but not enough to compensate for the "loss of home" feeling expressed in the song's lyrics. Former cotton field workers were now caught in a diferent economic web but had too much pride to admit that their new status was less then what they wanted it to be. They were trapped in a life of misery and memories.²

The song in question was released in 1963, and had the artist tried to live out his dream and go back home, it is doubtful that he could have found his way. That would have been particlary true if he lived in the lower Mississippi River valley, an area popularly referred to as "the Delta." In the decades following World War II the natural landscape in that regon was altered so dramatically, by removing hardwood forests, draining wetlands, and stream channelization that it was hardly recognizable to those who lived there prior to World War II.³

Fast forward to 1985, and look in on Detroit city again, this time through the eyes of a former black sharecropper (at least the son of a sharecropper) from the lower Mississippi River valley. Fifteen years of modernization had produced a new white gold, even more profitable than old "king cotton." The scene is Billy Joe's Party Store a small shop not far from Red River and Seventh streets, ground zero in Detroit's famed drug district.⁴

Billy Joe is Bill Joe Chambers only a few short years removed from Marianna, Lee County, Arkansas in the heart of the Delta. He was a middle child in the multi- member family of Chambers who had been sharecroppers since shortly after the Civil War. Billy Joe had made his way to Detroit on a Greyhound bus by way of Memphis, Tennessee. He went there to join his older brother Larry, who had also left Marianna for Detroit to join the oldest brother, a veteran of World War II who decided to stay in the north after being discharged from the army.⁵

Billy Joe and Larry worked their way into the crack cocaine trafficking of MO Town and prospered. By 1985 they had become the crack kings of Detroit. They had done so by employing the same hard work ethic they had learned in the cotton fields of the Arkansas Delta -- an honest day's work for, in this case, a dishonest dollar. Along the way the two brothers employed a dozen and more youths from their hometown to do their drug running. In 1985 Billy Joe and Larry were grossing over \$200,000 dollars a day and in 1986 they took in \$55 million. These sons of a sharecropper from Marianna, Arkansas had profits that year greater than the Chrysler Corporation.⁶

When the youngest member of the Chambers' family graduated from high school, Billy Joe and his brothers flew to Memphis, rented five stretch Cadillac limousines, and drove to Marianna High for the graduation ceremony. A reporter noted that the former sharecroppers were greeted like Hollywood movie stars and the brothers played to the crowd by throwing money out the window. But the good times did not last forever. Federal narcotics agents got on to Billy Joe's

Party Store and busted the brothers in 1988. They now sit in federal prison with only fading memories of the flush times.⁷

The hero of Bobby Bare's song and the Chambers brothers made their way to the North country by different routes. But it was the same set of circumstances, which drove them there.

How did the lower Mississippi River valley get to be in such desperate economic straits and cause its young citizens to seek opportunity elsewhere? Were circumstances there following World War II significantly different from the pre-War years? Using the Arkansas side of the Mississippi River as a case study, this paper will investigate how a region so rich in natural resources could so consistently leave so many of its people in desperate poverty for such a long time. This analysis will focus on issues which sometimes independently and other times interdependently produced the circumstances that periodically received attention but seem to defy public policy solutions. While cropping practices remain an important part on any discussion about the Delta, a more significant question has to do with lifestyle changes brought on by the agricultural revolution following World War II. This paper will examine those issues as well.

To date most analysis of the post-World War II Delta and the South in general, has focused on the changes in the cotton industry. Particular attention has been paid to, the impact that mechanization had on cropping practices and the traditional labor system. This is altogether appropriate because as so many talented historians have pointed out, cotton was a constant theme in the south. Except for slavery, few things changed in that region for over a century prior to 1940. Generations of people measured their lives by the rhythmic cycle of nature and a single crop. Their culture was tied to cotton not unlike the Plains Indians' dependence on the buffalo.⁸

Cotton, without respect to race, class, or gender, gave Delta farmers, their identity, their livelihood, and a future occupation for their children. In 1940 Arkansas's twenty-one Delta counties had approximately 1.2 million acres in cotton planted on more than 87,000 farms. The

work force included more than 65,000 tenant and sharecroppers who worked more than 65% of the land in cultivation. "⁹ But, this way of life changed in a single generation. The old lifestyle of large land owners subdividing their acreage among multiple tenants and sharecroppers was fundamentally altered. The world of the cropper with his limited tools and output, controlled largely by a local economy, gave way to a professionally trained manager armed with a large array of complex machines and connected to a network of market forces operating around the world.¹⁰

Cotton may have been the starting point for analyzing the new agriculture, but in many ways it was more a reflection of the changes being made, than a cause. In reality mechanization came too late to save the cotton economy -- at least in the Arkansas Delta. By the time the technical imperfections had been eliminated from the mechanical cotton harvester in the early 1950's, Delta farmers were already turning their backs on cotton as their crop of choice.¹¹ New crops, particularly rice and soybeans, had made their appearance and quickly won a loyal following. After only a few years of experience, most farmers were convinced that the relative ease of producing soybeans, when compared to cotton made the former the crop for the future. Rice too, due to its greater economic return, found increasing favor in the Arkansas Delta. Most farmers were willing to make long term commitments to these new crops even though it meant acquiring different type of machines and equipment.¹² In 1940, Delta counties only cultivated 153,000 acres of rice and 176,000 acres of soybeans -- compared to 1.2 million acres of cotton. But in the next twenty years those figures changed dramatically¹³

Reasons for the shift from cotton to rice and soybeans are complex. However, the physically geography of the Delta must be considered on any short list of primary causes. The new agriculture could not have developed without significantly altering the area's two most significant features-- trees and wetlands. These natural barriers confounded Anglo-Americans

for over a hundred years after the first farmers arrived in the 1820's. With limited tools and technology they were at a decided disadvantage when taking on the swamps and forest. As late as 1940 more than one half of the land area in the Arkansas Delta was still undeveloped.¹⁴

Little has been written about the Arkansas Delta and perhaps a brief description of the area is appropriate. This Alluvial Plain was formed by the Arkansas, Mississippi, and Ohio rivers over the last two million years. Like giant, unsecured fire hoses, these rivers meandered back and forth over a 150-mile front South of Cape Girardeau Missouri. Sweeping away vegetation during its many flood stages, the rivers deposited over one hundred feet of sand and clay soils into the Gulf Coast Embayment.¹⁵

For thousands of years these rivers carried soil particles from the upper Mid West as they cut through thick loess deposits in the lower Mississippi Valley. Flooding was frequent and as the floodwaters rose out of the normal river channel the principles of hydrology caused the heavier, coarser soil particles to fall to the bottom. However, the lighter, finer, soils were carried a greater distance from the main river channel. Over time the coarser particles, called sand, built a natural dike along the riverbank and frequently prevented water carrying the finer particles from returning to the main channel. Trapped in stagnant pools, these waters formed backwater swamps and the finer soil particles coalesced into a tightly compacted mass known as clay. The rushing floodwaters also changed courses frequently, carving out new channels and leaving the old river behind as "ox-bow" lakes and bayous. These dead channels were some of the first lands sought out by the Anglo-American cotton farmers arriving from the East.¹⁶

Except for two prominent features, the Grand Prairie and Crowley's Ridge, the Arkansas Delta is basically level and less than 200 feet above sea level. Elevation, from highest to lowest points varies less than 150 feet over its entire 250 mile length.¹⁷ The Grand Prairie, a natural grassland, occupies over a half million acres in the south central section. Crowley's Ridge was

formed by wind blown dust particles that somehow escaped prehistoric floods of the Mississippi and Ohio rivers. It rises over two hundred feet above the flood plain and varies up to ten miles in width as it stretches some 150 miles in the extreme north eastern region of the Delta.¹⁸

The mild, humid climate in the Delta region supported an abundance of plant and animal life. Prior to human habitation, foresters estimate that 96% of Arkansas's more than 33 million acres were covered by forest. The region classified as Delta by the Arkansas Forestry Commission comprises some 9.4 million acres of those acres. Assuming this area had approximately the same percentage of forest as the rest of the state, there were about 9 million acres covered with trees prior to human alteration.¹⁹ Over 80% of the Delta's trees were classified as bottomland hardwoods. Fifty years of commercial logging activity, beginning in the 1880's, had reduced the Delta's forest to some 4.3 million acres (45% of the land area) when the first official survey was taken in the late 1930's.²⁰

Swamplands and bayous as previously mentioned, originally made up the other predominant physical feature of the Delta. Nearly 80%, over 7 million acres, of the region was officially classified as swampland after the federal Watershed Protection and Flood Prevention Act was passed in 1954.¹⁴ Some effort had been made at ditching and draining the area's many wet spots prior to World War II. However, individuals were limited in what they could do because of inadequate and inappropriate equipment. Prior to the War, cotton with its low tolerance for heavy, wet soils, presented farmers with a significant challenge in maneuvering their fields amidst the forest and finding elevation high enough to avoid overflow. By 1940 most of the acceptable cotton land was in cultivation. Cotton acreage continued to increase slightly until 1955, but the growth was much smaller in comparison to rice and soybeans and farmers focused their attention on new practices related to those crops.²¹

Considering that Arkansas's Delta only had 2 million acres not designated as swampland, and that just over 1 million of those acres were already committed to cotton, it became obvious that farmers must either give up some of their cotton land or clear new ground for rice and soybeans. Did landowners turn to these new crops because they were rapidly losing their traditional labor force? Or, did sharecroppers and tenant farmers leave because the new crops were heavily mechanized and no longer required their services? These questions are still being debated by historians. In any event, most Arkansas farmers chose to limit their cotton acreage in favor of rice and soybeans and saw dramatic results.²²

In their search for new farm land, post World War II Delta farmers first turned their attention to the forests. Traditionally, farmers spent most of their non-cropping months each year working in the timber. Part of their effort went into logging operations for area sawmills to earn extra income but at the same time they cleared new land for farming. Working primarily with hand tools and oxen or mules, individual farmers were limited in how much land they could clear in a year or even a lifetime.²³ However, technology developed in World War II and money saved from wartime profits allowed a limited number of farmers to obtain, or hire, power equipment and greatly accelerate the clearing process. The machine that transformed the Delta was not the International Harvester Company's mechanical cotton picker, but a caterpillar tractor equipped with cutting blades and tree pushers. These forty-ton crawlers made their appearance soon after the War, moved across the Delta at will and removed every obstacle in their path. War time research led to refinements in the "torque converter" and "power shift transmission" and allowed one man to clear in one day what it took a family a lifetime to accomplish using the traditional means.²⁴

For a time in the 1950's and 1960's timber removal in the Delta became a full-time business. In a little more than three decades, 1940-1978, some 2.5 million acres of forest was

cleared and most of that land was brought into cultivation. In previous years much of the timber had been cut for lumber. However, in post-World War II the normal practice was to push the downed trees into rows and burn them.²⁵

The rapid disappearance of the hardwoods was a great asset for the rice and soybean farmers. However, by 1970 timber clearing began to raise concern from a number of non-agricultural interest groups. Fish and wildlife management officials worried about the effect such practices would have their activities. One individual noted that as the hardwood stands disappeared so did the game animals. Fishing enthusiasts likewise complained that sheet erosion on newly cleared land destroyed the quality of fishing in Delta streams. One county resident testified that the St. Francis River "at one time offered the finest largemouth fishing in Arkansas. But once the forest was [sic] stripped away [the river] either dried up or ran brown with the flow of silt."²⁶

Environmentalists worried that clearing the river bottoms for cropland would force cattlemen to utilize the more rugged lands for pasture and further contribute to erosion. Others noted that the hardwood environment provided a unique habitat for certain animals and feared that those species would be lost. Some criticized timber companies for replacing hardwoods with pines and other softwoods because they provided faster rate of return on capital investment.²⁷²¹

The methods used to clear the hardwoods were equally bothersome to many. One observer reported that parcels of 5,000 to 10,000 acres at time were being cleared as a single project. He openly wondered if an "Eastern Arkansas practically devoid of trees and with almost no opportunity for outdoor recreation in a natural beauty setting be able to attract new industry or retain its present industries? ... Would it be the kind of place where outsiders would want to spend their vacation or even visit?"²⁸

While the public debate on forestry practices was going on, draining and dredging operations in the swamplands were also proceeding at a rapid pace. Technology played a major role in this area too as "self-propelled, rubber tired . . . scraper" machines made their appearance on the scene in the 1950's. On average, these "earth movers" transported up to fourteen cubic yards of dirt at one time and they were highly mobile. This new equipment made it possible to bring new land into cultivation that would have taken centuries to accomplish using methods of the pre-War era.²⁹

Public policy was equally important in the matter of clearing and draining the Arkansas Delta. As previously noted, in 1954, the U. S. Congress passed a Watershed Protection and Flood Prevention Act designed "to improve land already cleared for either crops or pasture," by channeling and damming streams that were prone to flood. In the next fifteen years, twelve "watershed districts" were formed in the state and eleven of those were in the delta counties.³⁰

The eleven flood control projects resulted in over 400 miles of stream channelization and brought some 4.7 million acres (of the Delta's 9.4 million acres) into drainage districts. After 1970, federal officials modified the program and steps were taken to limit new acreage being developed for agriculture. However, by that time the Delta's 4.4 million acres in forestland had been reduced to 1.8 million acres and one half of the original 7.7 million acres of swampland were in drainage districts.³¹

There was a direct correlation between clearing and drainage projects and an increase in soybean and rice production. These new crops brought diversification to the delta's agricultural practices that generations of spokesmen, both public and private, had only been able to dream about.

Soybeans, the more versatile of the two crops, gained in popularity over rice. "Beans" became the crop choice for delta farmers a decade after the War.³² In 1945 about 4.5 acres of

cotton were planted for each acre of soybeans; by 1955 acreage of the two crops was almost equal and by 1960 there were over 6 acres of soybeans for each acre of cotton. Part of this change was a reflection of market conditions but a more significant reason was the fact that soybeans were better adapted to the soils of the Delta -- particularly the newly cleared timberlands along the swamps and bayous.³³

Public policy also influenced the shift from cotton to soybeans. The federal farm bill of 1956 instituted a new plan for cotton producers. The traditional price support was continued, however to qualify for a subsidy farmers were required to take a designated amount of cotton acreage out of production. Policy makers conceived this "soil bank" program as a way to reduce surpluses in cotton and certain other commodities. To some extent the plan worked.³⁴ However, a more significant outgrowth of that policy was the acceleration of soybean production. Farmers, faced with limitations on cotton acreage, turned to soybean production with a passion since the latter was not limited by acreage reductions and market prices were high through most the 1960's and 1970's.³⁵

High crop prices and the availability of newly developed land led to a boom in Delta agriculture in the 1970's. Opportunities for quick profits attracted a variety of new farmers, as well as a number of non-farm investors, many of whom were unfamiliar and unconcerned with traditional cropping practices.³⁶ These new entrants approached farming strictly as a business enterprise and their entry drove up land prices at a rapid rate. The boom peaked in 1982 when the average price for the state reached \$1095 per acre. However, some land, already cleared and drained, in the Delta sold for as much as \$2500 per acre.³⁷

Changes in Delta agricultural practices had important economic implications. But perhaps the most significant change came in the area social relationships. The combination of clearing the forestlands, draining swamps, channeling streams and replacing cotton with rice and soybeans

transformed the region's culture. Ironically, while millions of new acres were brought into cultivation, thousands of people were leaving the land.³⁸ The way of life which had sustained them for generations was rapidly dying. Not only was their occupation gone, but also the forest and swamps which served as a source for food, fuel, and leisure were all but lost to them. Billy Joe Chambers remembered that when he was still living at home "we had the bayou and the forest" for food and play.³⁹

As the demographic shift began to occur, the region developed pockets of settlement peopled with individuals without land and dependent on a day wage for income. These individuals were particularly susceptible to the cyclical fluctuations of prosperity and recession and progressively lost economic control of their lives. Without regular incomes, they became dependent on public housing and food subsidies and spent an extended amount of time unemployed -- even as landowners hired migrant workers from Mexico as day laborers. These former sharecroppers and tenant farmers were not the source of the new agriculture but rather were reflective of its changes.⁴⁰

As previously noted, the agricultural census in 1940 reported over 65,000 tenant/sharecroppers in the Delta counties. By 1964, the year the USDA stop recording that information, the number had declined to under 3000.⁴¹ More than just changing the historical direction of the cotton economy, the new agriculture produced a complex agribusiness and turned the Delta into a collection of social units not unlike a giant ghetto. Prior to World War II, the Arkansas Delta was one of the most rural regions in the nation. No town had more than 25,000 population and only 6 had a population over 5000. The 21 counties had a combined population of 704,608 but were only 23 percent urban.⁴²

The 77 percent of the population classified as rural in 1940, while faced with seasonal unemployment, still had access to land for garden plots and hunted wild game and fowl in the

region's vast forests. By national economic standards many lived in poverty, but they were still able to maintain a self-sufficient lifestyle. Within a decade after the war, these century old lifestyles began to change. As the forest was cleared, wetlands drained, and mechanization began to take hold, thousands of people moved to the nearest town and many others moved out of state. By 1990 population in the twenty-one test counties had dropped to 599,966, a loss of over 100,000 since 1949, and were 60 percent urban. While numerous small communities went out of existence, forty-two new towns were added to the landscape in the same time period. Perhaps as an indication of how valuable farmland had become, nine of the state's ten most densely populated towns were located in the Delta. Unlike the rural areas almost all the Delta towns were either stable or had an increasing population.⁴³

Although smaller in size, most of these towns faced the same kinds of human services and civil rights problems as their big city counterparts. In fifty years the region's culture changed from a rural, self-sufficient enterprise to an urban society burdened with poverty and increasingly dependent on public services.⁴⁴ The Great Society programs of President Lyndon Johnson stimulated a boom in public housing construction. These "planned communities" became a prominent architectural feature of every county seat town in the region -- a feature not seen since the Farm Security days of the 1930's. In an area that repeatedly produced a surplus in certain commodities, food stamp allocations steadily increased from the 1960's through the 1980's.⁴⁵

By the mid-1980's the agricultural revolution in the Arkansas Delta was largely complete. Single crop, hand labor, production had been replaced by diversification, mechanization, chemical, and biological agribusiness. As historian Gilbert Fite has noted, farmers became a new minority in many regions of the nation and that was particularly true in Eastern Arkansas. But, compared to pre World War II, most Delta farmers were also a new elite. Costs of machines, land, and "inputs" had forced out all but the most skilled and daring farmers out of business.

Those that remained were in a special class. Heavily capitalized, with access to thousands, sometime even millions, of dollars, these new farmers were products of an agribusiness system. But, even modernization did not remove risks involved in farming. In relative terms, the new agriculturists were in no better economic position than their traditional forebears were. Greater investments meant higher risks for loss and in the decade between 1985 and 1995 over 11,000 farmers left the Delta, victims of debt, low prices, and bankruptcy.⁴⁶

Come with me for one last scene. It was a hot steaming morning in early May 1988 as a collection of politicians, local dignitaries, school children, and some fifty media representatives gathered at Rosedale, Mississippi. It was a festive occasion, filled with symbolism and good will. As a Dixieland jazz band played enthusiastically, chief executives of the three participating states walked a gangplank to a barge anchored on the Mississippi River. The platform was then pushed to the middle of the river -- symbolically joining the borders of the three states. There Governors Bill Clinton of Arkansas, Buddy Roemer of Louisiana, and Ray Mabus of Mississippi, Ivy Leaguers and young Democrats all, signed an agreement committing their respective states to a cooperative effort at addressing the problems and potential of the lower Mississippi River Valley, commonly known as the Delta.⁴⁷

At the time the governors signed their tripartite agreement, per capita income in the Delta region was fifty percent below the national average, infant mortality rates were the highest in the nation, and unemployment was three points above the national average. Even a casual observer could recognize that many people lived in desperate poverty and statistics confirmed that the lower Mississippi River valley was one of the poorest regions in the nation. Moreover, it had been so as long as anyone then living could remember. Some of those watching the signing ceremony were old enough to remember a similar event some forty years earlier, in April 1948, when representatives from the same three states signed a similar agreement near the same spot on

the river. The only significant change between 1945 and 2000 was that the gap between rich and poor had gotten wider.⁴⁸

Five months after the river ceremony, Senator Dale Bumpers of Arkansas and Mississippi Congressman Mike Espy sponsored a bill creating a "Lower Mississippi Delta Development Commission." Armed with a three million dollar budget, the Commission was given a two-year assignment to find some solutions to the Delta's chronic problems and help the region improve its quality of life. Chaired by Gov. Clinton and assisted by Governors. Mabus and Roemer, the nine member, all-white Commission included two former congressmen, a lawyer, a professor, a teacher, and one farmer. For over a year the panel conducted extensive hearings on both sides of the river. In August 1990 the Commission released its recommendations -- a sweeping ten-year blueprint, organized around twelve operating principles. The recommendations required a heavy infusion of state and federal dollars before most could be implemented. Again, another well intentioned, idealistic public initiative for helping people in the Delta failed to achieve its intended results.⁴⁹

Over the past sixty years the landscape in the Delta has changed drastically. Chances are, had Bobby Bare followed through on his dreams to come home to the cotton fields, he would have found the old home place leveled and the site planted in soybeans. The nearby slough would have been channeled, graded and planted in rice and hardly a tree could be seen.

¹ Joel Whitburn, Top Country Singles (Menomonee Falls, WI: Rsearch Records Inc., 2006).

² William Ferris, Blues from the Delta (Garden City: Anchor Books, 1979), 45-50.

³ Trusten Holder, The Disappearing Wetlands in Eastern Arkansas (Little Rock: Arkansas Planning Commission, 1990), 24-25.

⁴ William M Adler, Land of Opportunity: One Family's Quest for the American Dream in the Age of Crack (New York: Penquin Books, Inc., 1996), 5-7.

⁵ Ibid.

⁶ Ibid.

⁷ Jeff Nighbyrd, "Bill Adler and the Drug Underworld Innocence and Savagery," internet file http://www.mrsmartypants.com/issues/vol_15/issue2/, accessed April 16, 2002.

- ⁸ For the best general treatment of Post World War II changes in the South see Gilbert C. Fite, Cotton Fields No More: Southern Agriculture, 1865-1980 (Lexington: University of Kentucky Press, 1984); Pete Daniel, Breaking the Land: The Transformation of Cotton, Tobacco, and Rice Cultures since 1880 (University of Illinois Press, 1985); Jack Temple Kirby, Rural Worlds Lost: The American South 1920-1960 (Baton Rouge: Louisiana State University Press, 1987); James C. Cobb The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Hisotry, (New York: Oxford University Press, 1992), Donald Holley, The Second Great Emancipation: The Mechanical Cotton Picker, Black Migration, and How They Shaped the South (Fayetteville: University of Arkansas Press, 2000),
- ⁹ U. S. Census of Agriculture for 1945, Arkansas Statistics for Counties, I Part 23 (Washington, D. C.: Government Printing Office, 1946), 18-33; 34-46.
- ¹⁰ Donald Holley, "The Second Great Emancipation: The Rust Cotton Picker and How It Changed Arkansas," Arkansas Historical Quarterly, LII (Spring, 1993), 44-48 and Jeannie M. Wayne, "The Segregated Farm Program in Poinsett County," The Mississippi Quarterly, XLV (Fall, 1992), 421-22.
- ¹¹ Holly, "The Great Emanicipation," 67-71 and Arkansas Agricultural Statistics, 1950, 1955, 1960 (Fayetteville: Arkansas Agricultural Experiment Station, 1960), 6ff.
- ¹² Interview with C. Nelson Spicer, Rice/Cotton Farmer, by author February 5, 1990, Stuttgart, Arkansas.
- ¹³ U.S. Census of Agriculture, 1945, Arkansas, 47-68.
- ¹⁴ Hubert B. Stroud and Gerald T. Hanson, Arkansas Geography: The Physical Landscape and the Historical Setting (Little Rock: Rose Publishing Company, 1981), 27-29.
- ¹⁵ Rebecca DeArmond Husky, Beyond Bartholomew: The Portland Area History (Conway, AR: River Road Press, 1996), 205-209.
- ¹⁶ Ibid.
- ¹⁷ Thomas L. Foti The Natural Divisions of Arkansas (Little Rock: Arkansas Ecology Center, 1978), 65-69.
- ¹⁸ Ibid.
- ¹⁹ Frank H. Troutman, Timber Supplies of Industry in Arkansas (Washington, D. C.: Government Printing Office, 1956), 6-11.
- ²⁰ Herbert S. Sternitzke, Forest and the Arkansas Economy, (New Orleans: Southern Forest Experiment Station, 1960), 3-9.
- ²¹ Interview with Ruben Conard, Rice/Cotton Farmer, by author, February 5, 1990, Stuttgart, Arkansas and Randall A. Kramer and Leonard Shabman, "The Effects of Agricultural and Tax Policy Reform on the Economic Return to Wetland Drainage in the Mississippi Delta Region, Land Economics (August, 1993), 249-51.
- ²² Arkansas Agricultural Statistics, 1950, 1955, 1960, (Fayetteville: Arkansas Agricultural Experiment Station, 1960), 6-7, 17-18, 4-5.
- ²³ Judge Sam Robinson, Winning Against the Odds (Monroe, NY: Library Research Assoicates, 1993), 66-68.
- ²⁴ Trusten Holder, The Disappearing Wetlands in Eastern Arkansas (Little Rock: Arkansas Planning Commission), 24-25.
- ²⁵ Interview with Frank Means, custom "bull dozer" operator, by author December 12, 1994, Weiner, Arkansas.
- ²⁶ Jay Kaffka and George Purvis, "Wildlife versus Economics," Arkansas Game and Fish, II (Fall, 1969), 1.
- ²⁷ Jay Kaffka, "Our Diminishing Forest," Arkansas Game and Fish II (Fall, 1969), 2.
- ²⁸ Trusten Holder, "Conservation -- New Dimensions," Arkansas Game and Fish (Fall, 1969), 3.
- ²⁹ Ibid., 13-17.
- ³⁰ Hedges and Garner, Status of State Legislation, 7 and R. T. Sniegocki and M. S. Bedinger, Water for Arkansas (Little Rock: Arkansas Geological Commission, 1969), 23.
- ³¹ U.S. Army Corps of Engineers, Water Resources Developed by the U.S. Army Corps of Engineers in Arkansas (Dallas: U. S. Army Engineers Division, Southwest, 1981), 9, 31, 59, 63-67 and Holder, Disappearing Wetlands, 16-17.
- ³² U.S. Census for Agriculture, 1945, Arkansas, 63-78 and Arkansas Agricultural Statistics, 1960, pp. 18-19.
- ³³ Wayne D. Rasmussen and Gladys L. Baker, Price Supports and Adjustment Programs from 1933 through 1978 (Washington, D. C.: USDA, National Economic Analysis Division, 1979), 21.
- ³⁴ Arkansas Gazette, November 29, 1987.

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- ³⁵ U.S. Census for Agriculture, 1945, Arkansas, 63-78 and Arkansas Agricultural Statistics, 1960, pp. 18-19.
- ³⁶ Robert S. McCord, "A Report on the Disappearing Arkansasns," Arkansas Democrat Sunday Magazine, December, 4, 1955, p. 4.
- ³⁷ John Jones and Charles H. Barnard, Farm Real Estate: Historical Series Data, 1950-1985, (Washington, D. C.: USDA, Natural Resource Economics Division, 1985), 37.
- ³⁸ McCord, "Disappearing Arkansasns," 4
- ³⁹ Adler, Land of Opporutnity,
- ⁴⁰ Employment Security Division, Arkansas Labor Force Statistics: Annual Averages State and Area, 1970, 1975, 1993, (Little Rock: Employment Security Division, 1970-1993), 6, 9, 7.
- ⁴¹ U. S. Census of Agriculture, 1945, Arkansas, 34-46 and U. S. Census of Agriculture, 1964, Arkansas, 252-257.
- ⁴² Population Growth of Arkansas's Towns and Cities, 1940 to Present," City and Town (March, 1991), 6-9.
- ⁴³ Ibid.
- ⁴⁴ "Special Report: Power Shift," Arkansas Democrat-Gazette, August 15, 1993.
- ⁴⁵ Ibid.
- ⁴⁶ Ibid.
- ⁴⁷ Arkansas Gazette, May 10, 1988.
- ⁴⁸ Ibid. "Lower Mississippi Delta Development Act" joint hearing before the committees on Environment and Public Works and Small Business, United States Senate, One Hundredth Congress, second session, on S. 2246, a bill to establish the Lower Mississippi Delta Development Commission, June 28, 1988 (Washington, D.C.: Government Printing Office, 1988), and Wilbur F. Hawkins, "The Lower Mississippi Delta: A Region in Transition," Journal of State Government, (July/Seotember, 1990), 67-70.
- ⁴⁹ Arkansas Gazette, August 10, 1990 and Hawkins, "The Lower Mississippi Delta," 67-68.