1965, to a point of definite organization today.

I've watched this program grow and have reported on its growth through many conferences conducted in such faraway places as New Brunswick, N.J., Washington, D.C., Carbondale, Ill., Syracuse, N.Y., Indianapolis, and Chicago.

I've reported it from the field, from Boy Scout training sessions, and from actual field trips made by troops of Scouts with their buckets of water, spades, and bundles of seedlings.

I have enjoyed my share of helping to organize the first Boy Scout pilot planting program, working with the Central Indiana Council at Indianapolis. It was this test effort, in the spring of 1966, which proved to Scout executives at New Brunswick that industry would support such a program and that foresters, conservationists, and soil scientists could teach boys—in boy language—the rules that have developed from the knowledge gained by our researchers. This one council, in the Indianapolis area, planted 25,000 walnut seedlings in the first 9 days of April 1966.

Other wood industry men are at work with groups such as the Future Farmers of America and our 4–H Clubs—all very practical avenues for progress in making Americans more knowledgeable about the Nation's future needs in valuable hardwoods.

We're not out of the fine woods yet. And with the race getting faster, we never will be!

Rebuilding Rural America— An Ozarks Case History

MELVIN R. JANSSEN

In the mid-1950's, few would call the Ozarks a land of opportunity. Certainly not Amos Butcher. His small 165-acre Missouri farm, half in woods, didn't provide much income. There was no chance for his two sons to farm. There were no other jobs either, so they went to St. Louis to find work.

Neither would Bill Jennings, a miner until the lead and zinc mines closed down after the war. His only income came from a few odd jobs and a welfare check because he doesn't know much except mining. His son now works as a laborer in Kansas City.

Joe Miller would agree. One of the small businessmen in the many small towns, he saw his business slowly drop as two-thirds of his younger patrons moved

away. His daughter teaches school, but her pay is far below that of teachers in Oklahoma City.

All over the Ozarks, the hills and valleys were nice to see, but produced a poor living for most. The 79-county area had only two economic bright spots—Springfield, Mo., and Little Rock, Ark.

That was what Ronald Bird saw when he came to Columbia, Mo., in 1956 to work on Ozark problems. With

MELVIN R. JANSSEN is Assistant Director, Field Research Coordination, Economic Development Division, Economic Research Service.

In his chapter, the names of the researchers are real. Other names are fictional.



The pump and daffodils are the only reminders that a farm family migrated from the rural Ozarks to an urban area. Between 1950 and 1960, over one-third of the farm families left the land, a migration that continues.

Frank Miller, of the University of Missouri, he studied farms to learn what types would provide more adequate farm incomes.

Farmers with enough good land and capital were doing well, but there were too many Amos Butchers in the Ozarks who weren't. Ronald learned it would be necessary to consolidate several farms and reduce the number of farm families to improve farm incomes. Those remaining would have better income, but only if their management ability was improved.

The Missouri Extension Service, through the Balanced Farming Program, used results of the research to develop the management capacity of operators. However, without job opportunities farmers were loath to give up their land, and only a few improved their incomes. Yet, between 1950 and 1964, three-fifths of the farms in the Ozarks disappeared.

The Lake of the Ozarks and other areas seemed to provide an answer. Thousands of tourists were seeking

recreation experiences on lakes and streams. They needed goods, services, and accommodations. Would these provide suitable employment for people in the Ozarks? What was the impact of the tourists upon the economy of the area?

Ron Bird studied motels, restaurants, and other businesses to learn the level of gross and net incomes from the tourist trade. And of course, he learned the level of employment and the expenditures of the tourists.

Clearly some employment was provided. But frequently businesses were run by outsiders, like Roy Johnson from Chicago. He brought capital and know-how when he built his motel and restaurant. He hired local people as maids and waitresses at low pay, some with only part-time employment. The tourist trade provided employment and income, but could employ only a few of those who needed jobs.

In another part of the Ozarks, Max Iordan, working at the University of Arkansas, sought to learn if farmers could develop profitable recreation enterprises. He found that a few farmers like Pete Newlin were successful, but others like Ralph Jones lost money. Few farmers have a good location, managerial capacity, and can get along well enough with people to make money with a farm recreation enterprise. Most tourists want a combination of facilities and activities, not usually found on farms. Again, employment was created and some income improved, but only a fraction of the needs were met.

Other employment potentials were analyzed by a newcomer, O. Wendell Holmes, Jr. He studied the effects of a large Government installation, Fort Leonard Wood, on Pulaski County, Mo. This is one of the few rural counties with a large net immigration of males, age 20–24, from 1950 to 1960, many of whom were fresh recruits like Jimmy Grant. In addition to the 1,950 civilians employed directly on post, construction and military payrolls influenced the business of the small nearby towns. In turn, other businesses

benefited. But the growth in retail sales of the county was \$23 million. In Boone County, with an increase in student population and services at the University of Missouri and Stephens College in Columbia, retail sales had risen by \$31 million during the same period

As the number of problems identified grew, interest in low-income areas such as the Ozarks led to designation of the Ozarks Economic Development Region. It was clear that before economic development of the region could be stimulated, a concise inventory of the natural resources, people, community facilities, transportation, and

problems was needed.

Max Jordan and Lloyd Bender of the University of Arkansas prepared such a summary—"An Economic Survey of the Ozark Region." This guides legislators, program specialists, extension workers, researchers, and community leaders. It pointed to the needs for private and public investment to create employment, especially in recreation and service industries. Important needs are highway development to improve access to industry and markets and education to train the labor force to attract industry.

Subsequently, Bender joined the U.S. Department of Agriculture's Economic Research Service staff and worked closely with personnel of the Missouri Experiment Station to identify potential growth centers. The objective was to locate centers where public or private investment will generate further private investment and more jobs. Only four or five highly promising centers were found. Springfield, Mo., and Little Rock, Ark., were obvious. But less obvious were centers based on the recreation industry. Bender also worked to delineate functional economic areas based on growth centers. These can form the basic planning unit for development based on new investment to create some of the many jobs needed. But this indicates we must be careful in choosing the location for investment.

Recently, Gerald Doeksen began a study to learn the intricate flows of goods and services among industries of the Ozarks. He will learn which industries show the greatest promise for growth.

Ozark farmers with good management and enough land can have adequate income, comfortable housing, and a satisfactory level of living.



In the meantime, Jordan evaluated the effects of a shirt plant established in northern Arkansas. The industry is generally considered mobile because it requires a small fixed investment and utilizes semiskilled labor that can be trained easily. The plant, located in a building constructed with local funds and a development loan, employs 750 persons, mostly women. Beulah Jones has a better family income, but her husband works only part time. This condition creates family and social problems that can be solved only if a job can be found for her husband. Thus, it is necessary not only to provide jobs, but also in a mix with employment for those needing it.

Bird projected employment, wages, and output of the timber industry and agriculture in the Missouri portion of the Ozarks. In 1960, some 14,800 workers were employed in timber cutting, hauling, and processing. Since many persons like Fred Long were employed part time, an equivalent of only 6,800 workers were employed full time. The forest production is improving, and output is projected to increase. While the number of part-time workers may decline, the level of equivalent full-time employment will remain constant. As new technology is incorporated, output per worker will increase and wages will rise, but few new jobs will be found.

In a similar study of agriculture, it was found that there would be 25,500 equivalent full-time farms earning \$3,000 or 19,100 earning \$4,000. In 1964, there were 56,000 farms, some of them part-time farms.

Even modestly higher levels of income will reduce the employment in the industries studied.

It is clear that bringing mobile industry to the local area cannot hope to provide enough jobs. Some migration will have to continue. But unless young men and women are prepared with skills that can be used in other areas, they will be moving from a low income rural area to an urban area where their earnings will be low. How well are they prepared?

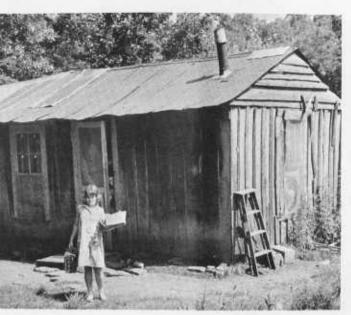


The Natural Arch Recreation Area of the Ozark National Forest attracts many visitors every year.

Jordan and Bender, working with James Golden of the University of Arkansas, studied rural high school boys in Arkansas. Lee Casper had high aspirations, but his expectation of becoming an engineer or a doctor was slight because his family couldn't pay even the first semester of tuition to college. Most, and especially Negroes, were poorly prepared to earn a living in an urban area or even to take vocational training after high school.

The team concluded that a two-pronged program is needed in any area to deal with Ozark poverty. First, the economic conditions must make jobs available, and then programs must help people like Lee Casper to prepare for the jobs. But little was known about the people in the area. Census data provide a description, but do not give individual data needed for some analyses.

Two new members of the team, Bernal Green at Arkansas and Herbert Hoover at Missouri, undertook a study of the characteristics of the people to





Skill training can start early. Left, Ozark girl waits outside her home for Extension Service bus workshop. Right, these girls used sewing machines in workshop to make dresses. Besides learning new skills, girls will be more apt to stay in school if they have suitable clothes to wear to class.

include education, employment, housing, income, debts, family composition, and assets. This knowledge will give better information to develop programs to help Lee Casper, Fred Long, and Beulah Jones' husband. Many programs have been based on a limited knowledge of individuals, did not fit the needs, and had modest success at best.

As an outgrowth of the main study of the people, Fred Hines joined the team. He wants to learn how education can best be applied to aid the Ozark people to secure and hold skilled jobs. This is one important key in the effort to bring new manufacturing and service industries to the area. A community that has trained workers or can train them has an advantage over one with an ample supply of unskilled, untrained laborers.

Another way to improve the overall level of skills of the labor force in an area is to have skilled workers and managerial personnel like Roy Johnson, the motel owner, come to the

area. In some areas of the South, large losses of Negroes have occurred, but there was net in-migration of whites. Most studies do not identify the people or the characteristics of those who move in both directions.

Bender and Green, in cooperation with Rex Campbell of the University of Missouri, are studying in-migrants to Missouri and Arkansas. This project will take 2 years to complete. But we will know if the Roy Johnsons raise the levels of skills of the working force. Also, will the influx of skilled outsiders—to include former residents of the area—bring new ideas and attitudes that will help develop the area?

Many homes in the Ozarks are generally substandard. Hughes Spurlock is trying to learn how the housing of the area can be improved. It is also his goal to help housing program administrators and regional planners make sense of our present hodgepodge of housing location. Frank Brewer lives at the end of the road that should be abandoned. He drives to work on

the 2 extra miles of road that must be maintained, while the schoolbus drives 9 extra miles each day. Water and sewer systems are less feasible. And the area's scarce tax dollars are

stretched badly.

Two other team members are seeking to learn the relationship of highway development in area development. They are studying the location factors for new firms in relation to various types of highways. Also, they seek to learn how recreation developments can best benefit from highway improvements. John Kuehn is working with personnel of the Missouri Experiment Station. James P. Miller is working with the Texas Transportation Institute at College Station, Tex., to solve these problems.

The cooperative ERS-experiment station team has conceived of the Ozarks region as a multicounty, four-State activity in which planning of the region and its subregions must be integrated. The research has not made the region a Garden of Eden. But it has uncovered problems, focused upon them, and pointed the way to

program action.

It will take public and private investment over a period of several years to improve incomes of the people. Education takes years, and job skills take time to learn. Communities will have to revamp the educational system and upgrade the present schools. This will take time and effort, but Amos Butcher, Bill Jennings, and Joe Miller will have to see the problems and take action. What can be done about upgrading the unskilled? There are opportunities for Joe Miller's schoolteacher daughter to help. But unfortunately, some Ozark residents are getting too old to learn or for Roy Johnson to hire them. For these, a welfare program will need to supplement their low incomes to lift them beyond poverty.

With research guidance, the programs can guide the investment in human resources, natural resources, plants, and community facilities to improve the incomes and living levels of

people of the Ozarks.

Progress will be slow, because the problems did not develop overnight. But the ingredients for economic progress in the Ozarks have been isolated.

Left, boys display wood articles they made with power tools in bus workshop. Right, a work session underway inside the bus.



