historical series appears to be closely maintained in the simulated series.

"An Evaluation of the Importance of the Net Operating Loss Carryback to Oklahoma Cow-Calf Producers." *Randall D. Little and Daryll E. Ray, Oklahoma State University.*

This study investigated the importance of the net operating loss (NOL) carryback provision of the Federal tax law to a typical cow-calf producer under stochastic production and price conditions. Simulation modeling was used to generate estimates of adjusted gross income. Income taxes and after-tax income are derived from the adjusted gross income, both with and without the NOL carryback.

POSTERS PRESENTED
Annual Meeting, SAEA, Little Rock, Arkansas, February, 1990.

"Instructional Use of Computers: A Comparison of Selected Schools in the U.S." *Kim Jensen, Burton English, and Robert Goodman, University of Tennessee.*

The purpose of this study was to compare instructional use of computers in the southern region versus other regions. A 1989 survey of heads of departments of agricultural economics regarding computer use was conducted. Results revealed respondents within the region had fewer computers available for undergraduates than other respondents but compared favorably in computers for graduate students. A higher percentage regionally had instructional labs, used primarily by undergraduates. Graduate students usually used research laboratories. Most respondents believed computer literacy was critical to employability and ability to conduct research. Expansion of computer availability to students was a high priority, if given additional funding.

"Kentucky's 1890 Extension Small Farm Program: Using Paraprofessionals to Educate Limited-Resource Farmers." *Marion Simon, Kentucky State University.*

Cooperative extension's traditional methods do not always reach limited-resource farmers or fit their attitudes, educational levels, community status, off-farm job constraints, or financial constraints. Kentucky State University's 1890 Small Farm Program uses paraprofessionals to teach improved production and marketing practices to limited-resource farmers in eleven Kentucky counties. This pilot program has been successful in educating "hard-to-reach" small farmers by an on-farm, "one-on-one" approach. The paraprofessional's ability to gain the farmer's confidence has provided a vital link between "hard-to-reach" farmers and Kentucky's Cooperative Extension System.

"In-Class Computer-Generated Presentation Techniques." *Joe T. Davis, David L. Debertin, and Loys L. Mather, University of Kentucky.*

This poster displayed and provided a demonstration of instructional materials developed at the University of Kentucky using computer-generated graphics. The demonstrations were based on materials developed in five different classes, ranging from freshman to graduate level. Advantages and disadvantages of the technique were delineated along with hard copy examples of materials used in the various classes. Software and equipment requirements along with an estimated cost of developing the capability at another institution were also presented. A micro computer was used to demonstrate actual materials used in classes using the projection technology.

"The Establishment of a Consumer Information Management System." *Chung L. Huang and Sukant Misra, University of Georgia.*

The study presents the concept and operation of a Consumer Information Management System (CIMS) for collecting primary data to address consumer-oriented research issues. The main purpose of CIMS is to create an easy-access and ready-to-use system that can serve many potential surveys individually or simultaneously as needed. The discussion focuses on the advantages and disadvantages of such a system and on the importance of maintenance to keep panels representative over time. The CIMS data base may be expanded via networking with similar operations among researchers in other parts of the country.

"State Farm Credit Programs." *James Mikesell, Douglas Duncan, and George Wallace, Texas A&M University.*

While Federal credit subsidies to farmers are well known, many states also subsidize farm borrowers.

Among the forces driving recent changes in these state programs are the farm financial crisis of the early 1980s, the rapid growth of industrial revenue bond financing followed by its severe curtailment in 1986, and the growing number of states operating under balanced budget requirements. State programs to subsidize farm credit are increasingly those that have minimum risk exposure and impact on the state budget, piggy-back on other loan programs, and are targeted at specific state needs.

"Differences in Pecan Quality Perception at Farm and Wholesale Markets." *E. Eugene Wojciech, J. Florkowski, and Joseph C. Purcell, University of Georgia.*

Quality standards applied in the pecan industry differ from the grade standards suggested by USDA and growers' associations. Based on survey data, this paper identifies shell-out ratio, size, and color as the most frequent quality factors used by growers and shellers. Relationships between grower characteristics and quality factors were investigated using logit procedures. Results indicate the discrepancy between existing USDA written grade standards and those applied by industry. In addition, results identify grower characteristics important to understanding quality standards for pecans.

ORGANIZED SYMPOSIA
Annual Meeting SAEA, Little Rock, Arkansas, February, 1990.

EDUCATION: THE KEY TO SUSTAINED DEVELOPMENT IN THE RURAL SOUTH (Moderator: *Brady J. Deaton, University of Missouri*).

Organizer: *David Mulkey, University of Florida.*

Presenters: *David Mulkey, University of Florida; Kevin McNamara, University of Georgia; Sue Raftery, Southeastern Educational Improvement Laboratory.*

Education has become increasingly important to sustained development in the rural South. Traditional industries continue to decline in relative importance, and modernization of those industries and the shift toward knowledge-oriented service and manufacturing industries increases the education and skill requirements of the labor force. This symposium explored the issues surrounding improvement and community development and examined experience with a community-level educational improvement model developed by the Appalachian Educational Laboratory. Discussion focused on ways in which land grant/cooperative extension faculty can contribute to improving education in the rural South.

THE DESIGN, FUNDING AND EXTENSION OF INTERDISCIPLINARY WATER QUALITY RESEARCH (Moderator: *Larry D. Sanders, Oklahoma State University*).

Organizers: *Patricia E. Norris, Oklahoma State University and Damona G. Doye, Oklahoma State University.*

Presenters: *Charles J. Scifres, Oklahoma State University; Leonard A. Shabman, Virginia Polytechnic Institute State University; Wendell Gillium, North Carolina State University; Roy R. Carriker, University of Florida; Roy M. Gray, USDA.*

Water quality problems and their solutions cannot be treated adequately within traditional disciplinary research programs. Many agricultural scientists have begun to develop interdisciplinary water quality research efforts. Experience has shown that such efforts can provide excellent results in terms of the quality of the research and subsequent publications and extension programs. However, such efforts are not without their critics. This symposium identified the rewards and frustrations of interdisciplinary research programs and served as a guide to the successful design and completion of future efforts.