# STATE PURPOSE 032

A survey of peanut field losses incurred in harvesting was conducted in the eight major peanut-producing counties with the cooperation and assistance of county extension personnel. Final tabulation and analysis of the data are not complete, but the average loss per acre from all causes was about 536 pounds (unshelled weight). One of the most tangible benefits of this study promises to be the increased awareness on the part of the agents who participated of the potential loss in income resulting from poorly managed harvesting operations.

Considerable emphasis was given to farm machinery cafety through meetings, news articles, and radio programs. Extension Folder 155 on Farm Machinery Safety was revised and updated to include information on tractor roll bars and slow moving vehicle identification emblams.

### STATE PURPOSE 970

The Extension sponsored program to certify 14-15 year old youth to operate tractors and certain other farm machinery declared hazardous by the U.S. Department of labor was initiated on a statewide basis, and a kit was furnished to the extension agent in each county who will be responsible for training, testing, and issuing certificates to qualified youth. Further indoctrination in this program is continuing. Work with the 4-H Tractor Project, including a state and Eastern Regional Tractor Operators' Contest, was continued.

#### STATE PURPOSE 032

A bulletin on orchard spraying equipment was prepared for use by apple, peach, and other tree-crop farmers. Plans were developed for a low-profile ground sprayer suitable for use under low-henging limbs in orchards. Some field trial work was also done in developing and converting weed sprayer for applying liquid fertilizer suspension. Assistance was provided extension and research personnel in conducting a corn and soybean field day at the Tidewater Research Station, and a peanut field day at the Peanut Belt Research Station, in which displays and demonstrations of equipment were included.

A research paper on the effect of maturity, ripeness, and curing temperature of peanuts on light transmittance of the peanut oil was published in Transactions of American Society of Agricultural Engineers. This paper was based on research completed prior to this reporting period.

An agent training meeting on planters was conducted for agents from 50 counties.

# STATE PURPOSE 033

Educational work was conducted through county meetings and publications on grain drying and peanut curing. The peanut crop is now 90% mechanically cured, and the educational program is on the proper use to maintain quality.

We still need additional grain drying and storage so the program is directed at both the benefits and the proper use of the equipme nt.

## STATE PURPOSE 540

A new 4-H project and record book on Liquid Petroleum Gas and Natural Gas was prepared. The donor to this project is the North Carolina Liquid Petroleum Gas Association.

### STATE PURPOSE 970

The North Caroline 4-H Electric Congress was held at Black Mountain with approximately 240 4-H boys and girls attending. While at the Electric Congress, they saw outstanding 4-H electric demonstrations and heard reports and talks on the 4-H Electric Project in addition to the recreation and fun the programs provided.