

July 22, 1970

MEMORANDUM TO: Dr. W. C. Mills

FROM: George J. Kriz

SUBJECT: BAE Extension Contribution to the Poultry Area for  
the Progress Report for FY 1969-70

An on-farm test in which temperature, moisture, and gases are controlled in a renovated structure with a capacity of 26,000 birds which housed only 16,000 on the floor is being conducted with day-old chicks being placed in cages. Results are very encouraging except for mortality during the first week. The total operating cost for the feeders, waterers, heaters, fans, lights, and waste removal equipment was approximately \$100 from day-old chicks to six weeks of age for each brood of approximately 25,000 chicks.

Environment is being controlled in a caged-layer study with 30,000 birds in an automated 40'x500' house. Temperature in the totally enclosed, mechanically ventilated structure remained above 50° F. without supplemental heat; and ammonia, moisture, and other contaminants remained well within bounds when the temperature dropped to 9° F. The birds housed in the totally enclosed house remained steady in egg production, while laying birds in a curtain wall house owned by the same producer dropped 9.5% during the cold spell.

Electric power consumption by the feeders, fans, waterers, lights, pit cleaners, and egg gatherers was 67,570 kilowatt hours for the first eight months of the lay period.

GJK:s

July 22, 1970

MEMORANDUM TO: Dr. A. A. Banadyga

FROM: George J. Kriz

SUBJECT: BAE Extension Contribution to Horticultural  
Crops Area for Progress Report for FY 1969-70

Al, we have no single outstanding contributions to report in this area unless you want to consider the following:

A commercial fresh cabbage harvester was introduced into western and eastern North Carolina through four demonstrations arranged in cooperation with county extension personnel and the manufacturer. One North Carolina producer purchased a cabbage harvester as a result of the demonstrations.

(This is being evaluated more this year, as you know, and thus we may want to hold it off until next year. However, use your own judgment.)

A case study of once-over harvesting of pickling cucumbers was completed. (The data from this study is in a paper written by Humphries; and if you want to include this, please contact E. O. Beasley directly.)

GJK:s

July 22, 1970

MEMORANDUM TO: Mr. A. V. Allen

FROM: George J. Kris

SUBJECT: RAE Extension Contribution to the Livestock Area  
for the Progress Report for FY 1969-70

An on-farm test was begun with a commercial producer to study the performance of air conditioning as an effective zone coolant in farrowing houses. When the outside temperatures reached 96° F., conditioned air at 80° F. was enveloping the sow, keeping her very comfortable and free from maximum heat stress. The annual cost per stall was \$12.26, with an operating cost of approximately 5¢ per day per sow.

Several producers from neighboring states made trips to Raleigh to discuss this method of cooling, as well as other types of buildings and equipment that are being recommended in North Carolina.

In 1969, 5,646 building plans for swine buildings and equipment were distributed. This number has increased to 4,278 in the first half of 1970 alone.

Efforts on environmental control for swine are being extended to other states because a cooperative is now contracting the erection of swine buildings based on North Carolina plans.

GJK:s

July 22, 1970

MEMORANDUM TO: Mr. Lyman B. Dixon

FROM: George J. Kriz

SUBJECT: BAE Contribution to 4-H Area for Progress  
Report for FY 1969-70

New project manuals for Units I through III of the Bicycle Care and Safety Project were prepared.

Tractor operator contests were held at county, district, state, and national levels; an automobile driving contest was held at the state level.

Approximately 100 14-15 year old youth were certified for tractor operation, and over 200 were certified for other hazardous types of farm equipment.

A new project book was prepared for the 4-H Electric Project, which has one of the highest enrollments in North Carolina. Approximately 200 4-H boys and girls attended the 3-day 4-H Electric Congress sponsored in cooperation with the power suppliers in North Carolina.

GJK:s

July 22, 1970

MEMORANDUM TO: Mr. Glenn Toomey

FROM: George J. Kriz

SUBJECT: BAE Contribution to Section on Cotton

The following is the BAE contribution to the cotton section of the field crops section for the Progress Report 1969-1970:

"Minimum and no-tillage demonstration tests on cotton were conducted in four counties. Results and techniques were discussed with cotton extension agents at three area cotton production conferences and with cotton agri-business leaders at the annual meeting of the North Carolina Cotton Promotion Association."

GJK:s

CC: Dr. Guy Jones

July 22, 1970

MEMORANDUM TO: Dr. W. K. Collins

FROM: George J. Kriz

SUBJECT: BAE Contribution to Section on Tobacco  
(Flue Cured)

The following is the BAE contribution to the tobacco section of the field crops section for the Progress Report 1969-1970:

"On-farm evaluation and refinement of mechanized tobacco harvesting involving a mechanical harvester and bulk curing were conducted. Market acceptability of the tangled leaf tobacco which resulted was demonstrated by sale on the warehouse floor with no significant difference in price from hand harvested leaf."

GJK:s

CC: Dr. Guy Jones



July 22, 1970

MEMORANDUM TO: Dr. Guy L. Jones

FROM: George J. Kris

SUBJECT: Progress Report for FY.1969-70

Enclosed are copies of the memoranda which were sent to W. K. Collins and Glenn Toomey relating BAE contributions to the tobacco (flue cured) and cotton areas. I enclose these copies to you because of the late date.

I did not return to the office until July 22 and thus did not have time to send this information to Messrs. Collins and Toomey.

GJK:s

CC: Dr. W. K. Collins  
Mr. Glenn Toomey

AGRICULTURAL EXTENSION SERVICE  
NORTH CAROLINA STATE UNIVERSITY AT RALEIGH

SCHOOL OF AGRICULTURE AND LIFE SCIENCES

DEPARTMENT OF BIOLOGICAL AND  
AGRICULTURAL ENGINEERING  
Box 5906 ZIP 27607  
TELEPHONE 755-2675

July 23, 1970

MEMORANDUM TO: BAE Extension Specialists

FROM: George J. Kriz

SUBJECT: Progress Report for FY 1969-70

I have just completed reading the Progress Report for 1969-70. It has been a good year with several significant contributions made to the agricultural industry in North Carolina. I do believe, however, that we need to "brag" about ourselves more than the Progress Report indicates. I admire each of you for the manner in which you undertake your duties because many of the duties, tasks, which you perform are each in themselves outstanding success stories, but to you are merely routine.

In order to develop and expand our program we need to be able to point to monetary contributions made to the agricultural industry in North Carolina. Therefore, please be more conscious of the possible growth in net returns from the work which you are doing. These are the figures which administrators like to use in order to get additional funds. It may require a bit more work at present, but in the long run we will have more money and personnel with which to work.

In order that we may "brag" about ourselves for FY 1969-70, I am asking that the following items be expanded into success stories:

Zone cooling - L. B. Driggers  
Fertilizer and lime distribution - J. W. Glover  
Peanut losses - E. O. Beasley  
Land forming - G. J. Kriz

Please give me these success stories by August 7 so that I may transmit them with the remainder of our report to J. D. Dodson.

Thank you for your cooperation.

GJK:s



COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS, NORTH CAROLINA STATE UNIVERSITY AT RALEIGH, 100 COUNTIES AND U. S. DEPARTMENT OF AGRICULTURE COOPERATING