NORTH CAROLINA

AGRICULTURAL EXTENSION SERVICE

AGRICULTURAL ENGINEERING

PLAN OF WORK

FOR

1955

Major phases of project or subdivision of project covered	Name of Worker*	Percentage of time devoted to entire project by each worker
Farm Drainage, Irrigation, Soil Conservation Water Systems Farm Fencing	H. M. Ellis	100%
Rural Electrification Crop Drying	E. S. Coates	100%
Farm Machinery, Cotton Gins	J. C. Ferguson	100%
Farm Buildings, Plan Service	R. M. Ritchie, Jr.	100%
Result Housing Project	W. C. Warrick	100%

Date Submitted: December 22, 1954. Signed: _____
Project Leader

Date Approved: _____, 195_. Signed: _____
Asst. State Director of Extension

Date Approved: _____, 195_. Signed: _____
Director of Extension Work
U. S. Department of Agriculture

*If phases of project are divided between two or more workers, indicate assignment to each.

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PLAN OF WORK FOR THE DEPARTMENT OF EXTENSION

AGRICULTURAL ENGINEERING

A BRIEF STATEMENT REGARDING THE PRESENT SITUATION WHICH WAS TAKEN INTO CONSIDERATION BY EXTENSION SPECIALISTS IN THE DEPARTMENT OF AGRICULTURAL ENGINEERING IN PREPARING THEIR PLAN OF WORK FOR THE COMING YEAR.

North Carolina farmers face another challenging year in 1955 as they readjust their operations to maintain income with smaller acreage allotments on many of their crops. The cost-price relationship is still close; and since agricultural engineering fundamentally deals with more efficient production, a greater than ever before challenge meets each specialist in preparing his plan of work.

FARM MACHINERY: Farm mechanization with good management affords more efficient production and greater net income. There are, however, many critical problems associated with the transition to more complete mechanization.

Maximum use of appropriate combinations of both equipment and crops along with maintenance, operation costs, and timeliness of operation are all major considerations of the individual farmer.

Agricultural engineering technology applied to these situations can aid in solution of problems and consequently reduce the hazards commonly associated with commercial farming.

FARM BUILDINGS: There is a growing demand for more efficient farm buildings, both from the standpoint of use of building materials and labor-saving operations. Labor-saving designs are necessary because of increased labor costs and the mechanization of our field operations.

Hurricane "Hazel" in October, 1954, destroyed or severely damaged thousands of tobacco barns in eastern North Carolina, as well as numerous other types of

farm buildings. Most of these will have to be repaired or replaced during the coming year.

IRRIGATION: Four drought packed growing seasons working hand in hand with an accelerated educational program have brought about a general consciousness on the part of our citizens of the need for supplemental irrigation in our section.

With the realization that a dry spring will probably cinch the sale of $3,000,000 worth of irrigation equipment (not counting the costs of water supplies), a great deal of attention will be given this growing practice during the coming year.

DRAINAGE: Farm mechanization and the better utilization of farm labor require uniformity of land drainage. Due to the pressure of other phases of engineering, drainage will not be stressed as much as it deserves; but this department will continue in conducting a general educational program.

SOIL CONSERVATION: Because of the efforts of many agencies, farmers are more than ever aware of their soil losses; but as yet they have just begun the fight of checking soil erosion. As with drainage, the Extension program has necessarily been curtailed; but an educational program will continue to be conducted. The need for cooperation of all agencies in conducting this program will be stressed.

CROP PROCESSING: Emphasis is on quality in farm products, and quality is directly related to harvesting, handling, and storage practices. The continued drought during the past year prevented widespread purchase of crop drying equipment. The need for crop drying is as great as ever, and the work will be continued. Surpluses in certain crops have stepped up the need for properly designed storage facilities which will permit orderly marketing

at periods of high prices.

RURAL ELECTRIFICATION: With 96.9 per cent of North Carolina farms having electric service, and with a greater demand for efficiency in farming, the work in this field will be concentrated on selection and use of productive electrical equipment.

YOUTH PROBLEMS: With new developments taking place so rapidly in farming practices and in equipment, and with full realization that our present rural youth will be taking over the farms in a few short years, we must keep them well informed as how best to use better equipment for greater efficiencies and a higher level of living.

WATER SYSTEMS: The installation of running water in rural homes has not kept pace with our rural electrification program. We have failed so far in creating sufficient desire for the improvement. Work will be continued, and emphasis will be placed on press and radio promotion.

FARM MACHINERY

General drought conditions of 1954 throughout North Carolina materially affected farmers' net income and has been reflected in the farm machinery business. This condition will also affect sales during 1955. As a result of this situation, more tractors and farm equipment will be overhauled and reconditioned for another year's use, and fewer new units will be sold than would normally be expected.

Care and maintenance of tractors and farm equipment are of utmost importance to every farmer. Due to more limited possibilities of purchase of new equipment or replacements, special emphasis will be placed on conservation of machinery.

For several years past tractor maintenance and farm machinery schools have been extremely popular throughout the state. Many farmers fail to realize the importance of daily service and maintenance to the farm tractor and pay dearly for this neglect in expensive repairs and overhauls.

Fifty-five counties have requested assistance during the coming winter months in holding county-wide or community tractor maintenance and farm machinery schools for their farmers. County agents normally schedule one to three schools per county, which could result in 75 or more schools if all can be scheduled.

Two three-day tractor maintenance clinics for 4-H members, leaders, and assistant agents have again been scheduled for early February. These will be held in the Agricultural Engineering laboratories on the college campus and will have available the ecuipment and facilities of the department. The schools are sponsored annually by the American Oil Co. through the National 4-H Club Committee. Members of the Agricultural Engineering staff cooperate in this undertaking and afford the group a rather intensive course in tractor maintenance during the three day period. Sufficient tools and testing equipment,

along with a variety of tractors, make it possible for each student to actually gain practice in such work as adjusting valves, carburetors, engine timing, wheel bearing, lubrication, etc. These clinics have been a stimulus to the 4-H Tractor Maintenance projects at county level.

As a part of the 4-H Tractor Maintenance project, county-wide tractor operator contests are becoming increasingly more popular. It is anticipated that fifty or more counties will participate in such events in 1955, sending their winners into district contests from which winners will be selected for state competition. The state winner will compete in regional competition at Richmond, Va., with winners of other eastern seaboard states.

County-wide or community farm machinery field days continue to grow in popularity and are an excellent means of mass education in the proper use and wider utilization of power machinery on North Carolina farms. Farm machinery dealers generally have been very cooperative in this phase of Extension education; and through the efforts of county agents and specialists working in this field, more emphasis is being placed on the efficient use of machinery than on sales promotion that is too often the case when such events are arranged by individual dealers or manufacturers. Many new items of farm machinery and equipment are being developed annually that may be very appropriately featured at farm machinery field days. Twenty-two counties have requested assistance in conducting county-wide field days during 1955.

Joint meetings and demonstrations with Agronomy, Entomology, Farm Management, and other departments will be arranged as the demand justifies in 1955. Joint demonstrations may include such items as soil fumigation, weed control work, spray and dust applications, selection and adaptation of farm machinery to farm needs, etc.

Many special requests from county agents, vocational agriculture teachers, and others are received throughout the year, which cannot be included in the

annual plan of work. These requests oftentimes involve newly developed equipment or adaptations of conventional equipment peculiar, in many instances, to one particular area or crop. Every effort is made to render assistance in such cases where it is considered justified.

Resident short courses, while not a direct responsibility of Extension specialists, do consume considerable time throughout the year. Many of these involve study or adaptations of machinery and equipment requiring assistance of Agricultural Engineering specialists. The trend is now toward a more varied short course program, with increasingly more demands in this regard.

The new University television station, WUNC-TV, is scheduled to go on the air early in 1955 and will require the construction and arrangement of visual materials that will be much more time-consuming than normally required in radio presentations. Two programs dealing with farm machinery have already been scheduled and rehearsed. The first deals with farm tractor safety, and the other with daily care and maintenance of the farm tractor. Other programs dealing with power machinery and its use will be arranged during the year.

The Agricultural Engineering Department has worked very closely with North Carolina State Fair in arranging special exhibits involving the agricultural engineering field, and also in putting on an annual farm machinery parade in which all represented manufacturers participate. The facilities for farm machinery exhibits at the State Fair are continually being expanded to meet the requests of the many manufacturers and distributors of farm equipment.

North Carolina is fortunate in having a large number of strategically located experiment stations and state operated farms that not only serve the North Carolina farmer as research centers, but are excellent media by which new methods are conveyed directly to the farmer through annually scheduled field days. Farm machinery in recent years has taken a rather prominent place in practically all such events. As machinery becomes more and more vital to

successful farming operations, so will farm machinery and other agricultural engineering activities become more prominent in the annual field day programs.

To mention a few of the field days in which agricultural engineering will be directly involved, there are the annual forage crop field days, tobacco production field days, cotton, grain, and peanut field days.

Cotton ginning, while not an on-the-farm process, is considered a phase of preparation of cotton for the market and consequently falls in the category of farm machinery. Cotton gins in North Carolina are generally well equipped for processing the annual crop, and have an unusually good record in this regard.

Numerous cotton gin operator schools have been held in the past and will no doubt be requested, although not specifically scheduled in the 1955 plan of work.

North Carolina ginners have spent enormous sums of money in modernizing their plants in order that they stay abreast of modern ginning requirements. Mechanical harvesting of cotton has intensified the need for more modern facilities and has been met very admirably by the ginning industry in North Carolina; however, there is a definite responsibility on the part of the Extension Service to impress upon gin owners and operators the importance of proper handling and processing of the cotton crop through the more modern facilities so that the inherent quality will not be reduced.

MAJOR PROBLEMS:

1. To encourage and promote the use of more power machinery on North Carolina farms.

2. To counsel farmers and farm groups in wise selection of machinery and combinations to fit the farm and the operation or activity.

3. To encourage and teach better maintenance, utilization, and efficient use of power machinery.

4. To encourage better dealer-farmer relationships through more adequate service, sales follow-up, and general education in the mechanization of agriculture.

ACTIVITY GOALS:

107 Specialist days in the field.
90 Specialist days in the office.
90 Agent visits and conferences.
75 Tractor and farm machinery schools (method).
25 Field demonstrations (method or result).
4 Television shows.
4 Radio programs.
10 News articles.
2 Circular letters.

METHODS OF PROCEDURE:

Counties will be visited in compliance with requests contained in county plans of work, to hold conferences with agents, to assist with county-wide or community meetings, to assist with field meetings and demonstrations, and to make visits to individual farms on special problems.

Meetings planned include those on tractor and farm machinery maintenance, tractor and farm machinery safety, selection and adaptation of machinery to the farm, farm machinery field days or other special field days in which farm machinery is involved. Farm machinery dealers will also be contacted and solicited for their cooperation and assistance in both schools and field demonstration activities.

It is the purpose and desire of the Agricultural Engineering Extension group to further stimulate and wisely direct the thinking of our farmers in the

potential benefits of more and more mechanization in North Carolina agriculture.

COOPERATION:

Subject matter specialists of other departments will cooperate in meetings and demonstrations as requested. Agricultural Engineering specialists will also cooperate with other departments where assistance is needed in either meetings or field demonstration work.

Vocational teachers and Soil Conservation Service personnel have cooperated fully in field demonstration work throughout the state.

In any farm machinery educational program, the cooperation of local equipment dealers is of utmost importance. Dealers, blockmen, zone managers, and branch representatives of the various farm machinery manufacturers have been extremely cooperative and even anxious to assist in any possible way to further promote education in agricultural mechanization.

VISUAL AIDS:

Visual aids include a variety of material such as color slides of many types of farm equipment, both manufactured and farmer constructed.

Blue prints are available for three different types of home-made tractor mounted boom sprayers, also home constructed implement trailers and other popular items of home-made equipment.

Mimeographed material is available regarding the selection of appropriate machinery combinations for various type and size farms.

Similar materials are also available for the setting up of one or two row tractor cultivators and tractor planting rigs.

A demonstration kit including engine charts and other items of machinery along with cutaway models of air cleaners, carburetors, ignition units, oil filters, etc., for the teaching of tractor and farm machinery maintenance is available.

A demonstration panel including all the component parts necessary for the construction of pressure soil fumigation equipment and field sprayers is also available.

Another demonstration kit recently constructed consists of a panel and several model tractors which are used in demonstrating factors involved in the safe operation of the farm tractor.

FARM STRUCTURES

Housing

The picture of farm housing has changed so much since the 1950 census was taken that the figures are not very significant at present. Interest has grown in all phases of housing, and perhaps as much building was done on the farms of North Carolina in 1954 as during any post-war year. Surely the average farm family needs assistance in home planning or remodeling; even so, many more people are building better than ever. In many instances the business of farming drains most of the income for machinery, etc., at the sacrifice of better living conditions inside the home. This may be good economics, but better living conditions should not be overlooked.

RESEARCH:

Some research may be needed in solving condensation problems in the modern tightly constructed houses in this section of the country.

MAJOR PROBLEMS:

1. Lack of interest in better houses.

2. Methods and personnel to reach the people who so far are not reached, yet are most in need of help.

3. The do-it-yourself idea needs support in know-how education.

4. Agents need more training in solving housing problems.

5. The conservative nature of farmers, and the fact that the farm usually has to be mortgaged to borrow money, causes them to be reluctant to borrow for home building.

6. Practically all families need outside help in house planning.

ACTIVITY GOALS:

123 Specialists days in field.

156 Specialists days in office.

123 Agent conferences and visits.

10 Housing meetings.

10 Information leaflets.

15 News articles and T.V. programs.

10 New house plans to be drawn.

20 Floor plans for remodels.

15 Result demonstration houses finished.

METHODS OF PROCEDURE:

The result demonstration housing program will be continued with perhaps fewer projects being carried in 1955. At present twenty projects are underway or have recently been completed. Indications are that these demonstrations have been very effective. Several counties that have carried demonstration projects have requested more. More emphasis will be placed on general housing meetings for the purpose of education and to arouse interest in better housing. These meetings may then be followed up by individual family visits to assist families in solving problems peculiar to the family. It is planned that at least two days will be spent by a specialist in each county carrying the Farm and Home Development Program to assist with program families alone.

COOPERATION:

Method demonstrations will be conducted in cooperation with commercial firms at special interest meetings and in result demonstration houses. Cooperation with the House Furnishings specialists in housing meetings and in demonstration projects is anticipated.

Teachers of vocational agriculture and county sanitarians will be invited

to participate in demonstration house projects.

Joint cooperation of county agents and home agents will be solicited on all housing work.

PUBLICATIONS, VISUAL, AND OTHER TEACHING AIDS:

Maximum use will be made of result demonstration houses to get teaching materials. Information leaflets will be prepared on all worthy projects completed. It is hoped that most of the result demonstration projects carried next year will be built by newly developed plans suitable for use in the plan book.

Farm Service Buildings

The need for increased labor efficiency in farm operations has been widely recognized. The day of plentiful low cost labor has passed, and farm buildings should be designed with this thought in mind. Shortage of labor has brought about progress in the mechanization of most field operations, including the production of tobacco, North Carolina's chief source of farm income; but the design of most farm buildings as used in the state has not kept pace with the mechanization in the field. Future building designs should emphasize planning which will take advantage of all available labor-saving equipment.

North Carolina farmers are still seeking to increase income by adding livestock, dairy, and poultry enterprises where markets are available. With less favorable economic conditions, the cost of constructing buildings for such new enterprises may be a major obstacle. Therefore, building designs should be available which will be as economical as possible, consistent with sound management.

A large section of eastern North Carolina felt the full force of Hurricane "Hazel" in October, and tremendous damage was suffered by farm buildings. Tobacco barns were particularly vulnerable, and thousands of them were completely destroyed or severely damaged. Most of these buildings will have to be repaired or replaced this year, and this need has already caused an increase in requests for plans and assistance from that area. This situation offers an opportunity to promote the use of more desirable types of construction in repairing and replacing these buildings.

A new book of farm service building plans was distributed to agents in November, 1954. With this book in each agent's office, they should be able to do a much better job in the future in assisting farmers in the selection of plans. It will be the responsibility of this office to keep the plan books up

to date by supplying new or revised plans as those in the book become out of date.

RESEARCH NEEDED:

1. More data is needed for use in designing buildings for southern conditions. Much of the present data on livestock housing, grain storage, etc., is from northern or midwestern states.

2. Data on design of buildings for storage and handling of grain crops, particularly for more efficient operation where grain is being processed and fed on the farm.

3. Data on poultry house design for warm weather.

4. Data on structures for storage and feeding of forage crops, particularly designed for conservation of labor.

MAJOR PROBLEMS:

1. The need for more research data on which to base building designs.

2. Information on building needs to be presented in a form more readily accepted by farmers and builders.

3. More time to be devoted to plan service in order to keep plans up to date.

4. Many agents need more training before they will feel qualified to advise on building problems.

5. Need for closer cooperation between Extension workers and dealers and builders.

ACTIVITY GOALS:

74 Specialist days in field.

60 Specialist days in office.

60 Agent conferences and visits.

12 Meetings.

27 Construction demonstrations.

6 New plans prepared.

6 Present plans revised.

8 News articles, radio and T.V. talks.

3 Circular letters.

METHODS OF PROCEDURE:

Counties will be visited as requested to assist with meetings, to hold conferences with agents, and to make visits to individual farms on special problems. Meetings planned include those on silos, tobacco barns, and general meetings where a variety of buildings and the plan service will be discussed.

Work on silos will consume a great deal of specialist time. Because of increased livestock numbers and drought conditions for the past three years, farmers have come to appreciate the advantages of having means of preserving roughage for a year-round feed supply, and many are turning to silos for this purpose. A large number of silos were built during 1954, and 1955 should be another big year. Construction demonstrations for various types of silos have been requested in 22 counties. At these demonstrations it is planned to spend one or two days, depending on the type silo, in constructing enough of the structure to give information on proper methods. Types covered will be upright (brick and concrete block), trench (temporary and permanent), and bunker type.

Poultry specialists have felt for some time the need for better farm egg holding facilities if eggs of proper quality are to be marketed. Efforts to

date have resulted in only a small number of properly cooled egg holding rooms. Requests have been received from three counties for assistance in planning and constructing demonstration egg rooms, and plans are to set these demonstrations up in such a way that worthwhile records can be kept and results obtained which will be used in publicizing the benefits of having good egg holding facilities.

Tobacco barn work will be largely confined to furnishing plans and suggestions for reconstructing buildings damaged by the hurricane. Special attention will be given to working with cooperating farmers who plan to try to introduce labor-saving ideas into their tobacco buildings.

As much time as is available will be devoted to preparation of new plans and revision of plans in the plan service. Popular plans will be printed and added to the plan book which is in the county agents' offices.

COOPERATION:

Specialists from other departments will be consulted in connection with the preparation of new plans or revision of old ones.

Cooperation of other specialists will be requested in conducting meetings and demonstrations where appropriate.

Commercial representatives will assist in conducting some of the meetings and demonstrations and in supplying information and literature in their fields.

PUBLICATIONS, VISUAL, AND OTHER TEACHING AIDS:

Opening of the University of North Carolina television station in January will result in a demand for more good visual materials for use in programs.

Work has been begun on a demonstration kit on dairy barn planning which will be used for T.V. programs or small group meetings. This kit, when completed, will include materials for discussing barn remodeling, pole barns, silos, milking barns and milking parlors, and paved feed lots.

Other visual aids planned include a model sweet potato storage house and egg holding room.

Cooperation will be given in preparation of a bulletin on making and feeding grass silage. This will be published jointly by Agricultural Engineering, Animal Industry, and Agronomy.

IRRIGATION

A series of four drought filled growing seasons, plus an accelerated Extension program based on research facts and farmer experiences, the co-operation of all agricultural agencies, and the help of industry have caused North Carolina farmers to accept supplemental irrigation as another profitable practice.

The decision as to whether to irrigate or not should be based on a comparison of costs of irrigation against increased yields and improved quality. Crops with potentially high incomes per acre and where other recommended practices are employed, in general pay handsome dividends for irrigation. Among these crops are our commercial truck and tobacco. On the other hand, there are crops which facts indicate should not be irrigated. Among these are pastures for the production of beef and poor pastures on dairy farms, particularly with below average herds.

It is a fact that some sections of North Carolina experience a damaging drought each year. It is also a fact that some acreage of all our major crops is now being irrigated.

The best estimates that could be obtained indicated that there were 2500 acres of flue cured tobacco irrigated in North Carolina during the 1953 growing season. Present estimates are that 10,000 acres were irrigated during 1954, and enough acreage of other crops to boost the total to approximately 18,000 acres.

A survey of a large sample of irrigated tobacco following the 1952 growing season indicated additional net income per acre of $160.00. A similar survey, but covering a much larger sample, at the end of the 1953 season showed that an additional net income per acre of $346.00 was realized. These figures were not available in time for the plan of work for 1954. The acreage irrigated was used in connection with the figures of an earlier survey. Based on the $346.00

figure for 1954, our tobacco farmers realized an additional income of $865,000.00 because of irrigating this particular crop. All indications are that this is a very conservative estimate.

With over 600,000 acres of flue cured tobacco being grown in North Carolina, the possibilities of irrigation are almost unbelievable; and for the benefit of those that might be worried about increased production calling for further acreage cuts, it might be well to give thought to the fact that a considerable portion of this financial increase is based on quality rather than quantity.

Portable revolving sprinkler systems best suit the needs of North Carolina farmers. This is because of our undulating terrain, the nature of our soils, and the fact that surface treatment is not conducive to quality tobacco when surface treatment consists of a lot of earth moving.

For the past several years county agents have requested more specialist help on irrigation than the department could possibly supply. One specialist has devoted more and more time to this program, but it is impractical to allow more than approximately two-thirds of one specialist's time to the practice under present circumstances. Two full time specialists could not comply with the agents' requests for the first four months of the coming year. This statement is made for its value as situation information only.

Much is written concerning the irrigation of tobacco, and it is true that this crop is the big money maker for irrigators in this state. Consideration should be given the fact that a limited acreage of tobacco can be used as justification for covering the fixed cost of irrigation, making the irrigation of a lot of other crops profitable to the farmer.

MAJOR PROBLEMS:

1. Inadequate water supply:

Inadequate water supply is definitely proving to be the bottleneck to supplemental irrigation on a large number of North Carolina farms.

Our total annual rainfall is a discouraging factor from the standpoint of large expenditures for water supplies. Water from streams is expensive because it must be pumped, as a rule, long distances to reach land that is to be irrigated. Ponds are expensive to construct, and underground water is practically out of the question for two-thirds of the area of North Carolina that would like to irrigate. These conditions are stated as problems, but no intention is made to indicate that they are without solution. Ponds have wonderful possibilities for large areas of North Carolina where underground water is inadequate. We are just beginning to make use of wells for irrigation purposes.

2. Lack of information:

A. Insufficient information on infiltration rate of soils.

B. Insufficient information on water holding capacities of soils and water requirements of crops. Estimates have been made and can be adjusted, but definite research facts are badly needed.

3. Lack of personnel to conduct an adequate educational program:

Farmers are buying irrigation equipment at an alarming rate when we take into consideration their lack of knowledge concerning the proper use of this equipment.

ACTIVITY GOALS:

78 Specialist days in the field.

100 Specialist days in the office.

80 County agents to be assisted (plus their assistant agents).

5 County agent training schools.

1 Short course at the college.

28 County-wide demonstrations of portable irrigation equipment.

40 General educational meetings on irrigation.

1 T.V. show.

12 News articles.

AGENT TRAINING SCHOOLS:

These five schools will include all county agents from two of the six Extension districts, plus the assistant agents specializing in tobacco in another Extension district. These one-day schools will be for the purpose of giving the latest available information to the agents, discussing with them their responsibilities for the educational phase of the irrigation program and how the personnel of other agricultural agencies fit in the picture.

A discussion on the design of systems will be conducted, not with the thought of training them that they may design systems but in order that they may know what actually goes into the design of a typical irrigation system.

PLANNED DEMONSTRATIONS:

During 1955 planned county-wide demonstrations will again be used as the foundation for the program. These demonstrations will be located at strategic points to cover the main crops produced in this state. Sites will be selected with regard to water supply, both from the standpoint of permitting the use of a typical irrigation system as well as to bring out points for discussion. Consideration in selecting sites will be to accommodate a large group of spectators and how well the area in general can serve in putting the subject over.

At present seventeen different lines of irrigation equipment are being sold in North Carolina. The key person for each of these manufacturers within this state will be invited to have a representative attend each demonstration and put on an educational exhibit. This exhibit will consist of their fittings, their coupling, charts, and any other pertinent information which they can make

use of in a Fair-like exhibit. In each county-wide demonstration it is anticipated that there will be from six to fifteen such exhibits. At each demonstration one distributor will be asked to provide a typical system which the irrigation specialist can use in discussing size pipes, pumps and engines, fittings, performance of sprinkler heads of various sizes, etc.

The actual technique to be employed will be somewhat as follows:

The irrigation specialist will present the subject as he thinks it applies to the farmers of that particular county. He will make use of the demonstration unit to acquaint them with the actual mechanics of irrigation, and also to bring in the importance of considering fundamentals before a sales person or anyone else designs for them a system. Following this, each major line of equipment represented at the demonstration will be discussed by the person in charge, and his local dealers will be introduced. He will be given an opportunity of making statements concerning his organization, sales, and service; but he will be limited to a very few minutes of speaking time. After each exhibit is reviewed, the group will be called back together at the demonstration unit for a discussion period, at which time questions from the group will be invited.

It was necessary to change the type demonstrations which have proved so popular in the past because of the large number of cooperators in industry who wish to participate in the demonstrations. The demonstration described will permit their participation without prolonging the demonstration more than two hours.

COOPERATION:

Subject matter specialists of other departments will be invited to attend and cooperate in conducting these educational demonstrations.

The personnel of other agricultural agencies, teachers of vocational agriculture, and experienced farmers will be called on for their cooperation.

When irrigation first started making progress in North Carolina, the personnel of this department realized the importance of working with industry in trying to get the best possible systems designed for individual farms. At every opportunity industry has been invited to take their proper place with responsibility in conducting the program, and they will again be given opportunity to show their equipment and to meet the prospective irrigators. They have cooperated in a fine way in trying to see that they were in a position to properly design systems to meet the needs of our people.

VISUAL AIDS:

Work will be continued in building up a set of slides for agents' use in conducting educational meetings on irrigation, and charts and surveys will be made as the need arises.

DRAINAGE

In North Carolina approximately 4,000,000 acres are poorly drained. This figure includes woodlands, muck soil areas, and wet sands, as well as wet areas that are cleared. Soil and drainage specialists estimate that one-fourth of the 4,000,000 acres is in cultivation; and that 980,000 acres have some form of drainage; but that not more than one-fifth of this 980,000 acres has adequate drainage for the crops commonly grown in the area. Inadequate drainage of potentially good agricultural land is a statewide problem.

North Carolina farming is rapidly becoming mechanized, and mechanized farming demands uniformly drained fields. Coupled with this is a definite trend towards livestock farming, and this presents a real drainage problem because extremely low wet places are being surfaced drained to provide additional pasturage.

Due to the pressure from agents for assistance with other phases of engineering work, specialist help will be reduced below the amount normally allotted. This department will make every possible effort to continue to conduct its general educational program.

OBJECTIVES:

The over-all Agricultural Extension Program has been and will remain geared toward more efficient production. This program demands adequately drained land. Our objective is through an educational program to promote the use of better drainage practices in adequately draining land. Assistance will be given county agents in conducting method demonstrations.

MAJOR PROBLEMS:

1. Lack of satisfactory outlets.

2. Lack of personnel to satisfactorily conduct the needed educational program.

3. The high cost of installing under drains.

ACTIVITY GOALS:

5 Specialist days in field assisting in conducting county programs.

10 Specialist days in office preparing educational material to aid agents in carrying out their county programs.

6 Specialist days in office in cooperative work with personnel of the SCS and other agricultural agencies interested in drainage.

5 Demonstration meetings conducted by specialist.

4 News articles on drainage.

METHODS OF PROCEDURE:

An Extension specialist will assist agents in planning and conducting their county programs. In a few special cases specialist will hold the educational meeting and conduct the tile laying or ditch blasting demonstrations. This will be done primarily for the benefit of agent and leader training. The agent will not be expected or encouraged to launch a personal service program, but our demonstrations should enable him to conduct similar demonstrations and to make sound recommendations. He will be supplied with teaching aids so that he may feel confidence in carrying on the work.

COOPERATION:

Name of Agency	Assistance to be given	Assistance to be received
AGRICULTURAL STABILIZATION AND CONSERVATION ADMINISTRATION	Committee work on preparation of specifications for soil building practices and engineering advice on special programs.	Stimulation of program through payment to farmers for drainage practices.

SOIL CONSERVATION SERVICE	1. Preparation of specifications for all drainage practices.	1. SCS technician will make surveys for community projects.
	2. Will work together on the county demonstrations.	2. Will work together on the county demonstrations.
VOCATIONAL TEACHERS	They will be invited to attend the county demonstrations and to bring their students.	Teachers will assist in making surveys and will promote programs in other ways.

SOIL CONSERVATION

From more than 22 per cent of the total land area of North Carolina, erosion has stripped one-third or more of its topsoil. The Piedmont section, which covers about one-third of the state, has suffered the greatest loss. In ten of the worst eroded Piedmont counties, around 25 per cent of the area has been abandoned.

OBJECTIVE:

The Extension Agricultural Engineering Department is concerned with the educational program of the engineering phases of all conservation programs in the state. The county programs are well organized, and the county agents are well informed. The bulk of the field work is being conducted by the Soil Conservation Service, and only a small amount of field work is planned by the Agricultural Engineering Extension specialist. Agents are encouraged to continue their educational program by conducting educational demonstrations on the conservation of soils.

PLANNING AND TEACHING ACTIVITIES:

4 Specialist days in the field.

7 Specialist days in the office.

4 Method demonstration county meetings.

3 News articles.

4 State level conferences with ASCA and SCS officials.

COOPERATION:

Name of Agency	Assistance to be given	Assistance to be received
AGRICULTURAL STABILIZATION AND CONSERVATION ADMINISTRATION	In preparation of specifications for earth moving practices.	Stimulation of program through incentive payments.

SOIL CONSERVATION SERVICE	Conducting educational program and in coordinating work.	Conducting action program through Soil Conservation districts.
VOCATIONAL TEACHERS	Furnishing educational materials and inviting them to participate in demonstrations.	Helping in training farmers and making farm visits on follow-up work.

CROP PROCESSING

The North Carolina farmer today finds himself in an unenviable position with national surpluses in certain cash crops and droughts seriously affecting production. Controlled grain acreages are such that farmers are compelled to grow and harvest top quality grain and store it until top market prices are available. This can be done through following improved agronomic and engineering practices. The state consumption of grain products has reached such proportions that the farmer can have a year around market for his grain if he can supply a quality product at the time it is needed by the processor.

The quality must come from the field. With high humidities and other weather hazards that prevail at harvest season, artificial drying of several of the grain crops is a necessity to assure that best quality grains go into storage. Approved grain storage facilities on the farm is another of the steps toward orderly marketing and higher prices.

A combined educational program in production, drying, storage, and marketing will be stepped up during 1955 to reach more of the North Carolina grain producers.

Farmers are forced to find new ways to supplement the income lost by acreage reductions of certain cash crops. Droughts have seriously affected feed production, and North Carolina is in greater need of hay than it has been in the past. With artificial curing systems that are properly designed, the quality and quantity per acre can be improved to a point where hay could be a cash crop locally and on an export basis.

MAJOR PROBLEMS:

1. Trained personnel: Distributors and dealers of processing equipment are not in line with best suited recommendations for North Carolina farmers. They are using research data accumulated in regions that differ

in climatic conditions, which is sometimes not at all satisfactory.

2. Farmers are not aware of benefits available through good storage practices and orderly marketing of grain.

3. More information on home processing of feeds is needed through research and field observation.

ACTIVITY GOALS:

72 Specialist days in field.

81 Specialist days in office.

41 Agent conferences and visits.

62 Counties assisted.

45 Field days and farm demonstrations.

4 Circular letters.

12 News articles, radio, and T.V. presentations.

METHOD OF PROCEDURE:

1. Hay drying school: A one day school will be held during the winter for dealers of hay drying equipment and agricultural representatives of electric power suppliers. Research information and data taken from farm use of the platform baled hay drier will be discussed. A demonstration will be given on how the platform drier operates. The purposes of this meeting are:

(1) To inform all persons working with the problems of hay drying as to the best possible way of doing the job.

(2) To increase the number of properly designed hay drying systems on North Carolina farms.

(3) To reduce hay drying failures due to inexperienced salesmen selling inadequate equipment to farmers.

2. Grain schools: Field demonstrations will be prepared and given in cooperation with Agronomy, Farm Management, Entomology Departments, and the North Carolina Department of Agriculture in a series of scheduled grain schools throughout the state. Demonstrations will include production, drying, storage, and marketing. Farmers will be shown how to maintain quality and handle grain more profitably by properly drying and storing. County-wide schools will be held in counties with critical need for more good grain storage. Approximately 15 counties will be included in the grain schools.

3. Sweet potato curing and storage: Twenty-five method demonstrations are planned with county agents to show practical method of curing and storing a home supply or small quantity of sweet potatoes for market. In some counties farmers will be selected to erect a recommended small house. Heating equipment will be installed in the demonstration. A horticultural specialist will demonstrate packing and will discuss storage requirements.

4. Field days and farm demonstrations: Method demonstrations on hay drying, grain drying, and storage will be held on approximately 25 farms where adequate facilities are in use. Demonstrations on grain drying and storage will be given at Small Grain Days at the Agricultural Experiment Station farms.

5. Approximately ten result demonstrations will be held at sites of platform baled hay drying systems.

6. Conferences and visits with agents will be made to assist in training the agents and planning individual farm drying plants. Ground work will be made at these conferences for future demonstrations and meetings with interested farmers constructing the necessary facilities.

7. Data will be collected from the field toward future promotion of feed processing on the farm.

8. Television and radio will be used regularly for promotion of recommended practices.

COOPERATION

Name of Agency	Assistance to be given	Assistance to be received
RESEARCH AGRICULTURAL ENGINEERING	Information observed in the field.	Recommendations from experimental data.
AGRICULTURAL STABILIZATION AND CONSERVATION ADMINISTRATION	Invited to participate on Grain School program.	Make loans on drying and storage equipment. Data on farm storage under loan during 1954-1955 season.
NORTH CAROLINA BANKS	Recommendations on proper drying and storage facilities.	Provide means for farmers insuring and financing needed equipment at reasonable costs.
CERTAIN FARMERS	Recommendations and advice on construction and operation of drying and storage facilities.	Data and observation of facilities; use of facilities for demonstrations.
ELECTRIC POWER SUPPLIERS AND DEALERS, DISTRIBUTORS, AND MANUFACTURERS OF DRYING AND STORAGE EQUIPMENT.	Recommendations on construction and operation of drying and storage facilities.	Equipment at demonstrations and field days. Promotion of recommended practices through unified educational program.

RURAL ELECTRIFICATION

On June 30, 1954, it was estimated that 96.9 per cent of North Carolina farms had electricity. With only a few farms without the services of electric power and the North Carolina farmer faced with a most serious problem--the problem of low income and high farming costs--it is necessary that our efforts be directed toward showing the farmer how he can most effectively turn to a more economical way of producing farm commodities. To be more efficient, the farmer must be taught to utilize more labor-saving equipment more wisely. His ability to purchase electric power-using products is somewhat impaired at the very time he stands in greatest need of the farming efficiencies obtainable through the use of many of these products.

With these facts in mind, and with the full realization that to correct these measures much effort must be made through an educational program, it seems wise to intensify the present program, particularly the program as it is related to the education of the farm youth. In only five to ten years these young people will be sharing in the responsibilities of community leadership. The standard of living of rural North Carolina will be determined by the efficiency of the individual farms owned and operated by these men and women of tomorrow.

MAJOR PROBLEMS:

1. Preparation of more subject matter material for adults and 4-H Club members on efficient operation of electrical equipment.

2. Training conferences with distributors and dealers concerning the situation facing the farming population.

3. Preparation of more teaching aids to be used by agents and adult leaders.

4. Community workshops where adults and club members can learn about electrical uses by working with electricity.

5. Drawing all electrical suppliers and educators more closely together in a well organized program aimed at properly informing the rural people.

6. More information concerning the specific uses of electricity such as brooding, heat uses, sanitation, and feed processing.

ACTIVITY GOALS:

53 Specialist days in field.

81 Specialist days in office.

43 Agent conferences and visits.

50 Counties assisted.

23 County-wide training meetings.

7 Circular letters and timely information.

14 News articles, radio, and T.V. Presentations.

METHODS OF PROCEDURE:

1. Meetings and demonstrations: Method demonstrations and special interest meetings on the use and care of electrical equipment will be held for farmers, at home demonstration clubs, and at 4-H Club meetings. Subjects for 1955 include: Hotbeds, Processing Equipment, Lighting, Wiring, Electrical Safety, Motors, and Potato House Heating. County-wide 4-H Club meetings will be used to promote the electric project. A demonstration will be used that will require audience participation.

2. Conferences and visits: Conferences will be held with county Extension agents and with agricultural engineers and electrical advisors of electric power suppliers to coordinate the educational programs. Assistance will be given in preparing and arranging for adult and 4-H Club demonstrations.

3. Distributors' meetings: Meetings will be held with electrical equipment distributors in cooperation with power suppliers to present the facts concerning the need for electrical equipment in production on the farms in North Carolina and to stimulate interest in selling this equipment.

4. A training school will be held for the benefit of all power suppliers personnel teaching the electrical classes at the summer 4-H Club camps so that all instruction will be similar.

5. Publicity: Power-use articles will be prepared to correspond with similar publicity sponsored by electric suppliers. News articles concerning the farmer-use of electricity for production purposes will be prepared by the state office.

6. Subject matter: Activity sheets with illustrations will be prepared for use by 4-H Club members in carrying on their study of the use of electricity and electrical equipment.

7. Television will be used frequently for timely demonstrations on increasing farm income and living standards through use of electricity.

8. County, district, and state demonstration contests will be held in the 4-H Club Farm and Home Electric Project. Club members from each county can participate for district and state honors. Demonstrations used in these contests will be given throughout the counties at local school, 4-H Club, civic, and home demonstration clubs.

COOPERATION:

The four major electric power suppliers will assist Westinghouse Educational Foundation in sponsoring the 4-H Club electric program. They will print

23,000 copies of the awards program leaflet for distribution in North Carolina. They will provide free trips to boy and girl winners and an agent from each county to the state Electric Congress in the fall. They will furnish demonstrators and demonstration equipment for electric classes in four summer 4-H Club camps. They will also provide demonstrators for local 4-H Club and home demonstration meetings.

Westinghouse will furnish county and state awards in the 4-H Electric program. Educational material will be provided for camp instruction and individual club member use.

Electric Membership Cooperatives will again sponsor the county, district, and state Electric Demonstration contests, providing suitable awards for district and state winners. They will provide assistance in promoting both the youth and adult educational program on the use of electrical equipment. They will assist with local and county 4-H Club and home demonstration meetings, giving demonstrations and individual help to 4-H Club members.

Electrical equipment suppliers will assist by loaning demonstration equipment and providing some equipment at special rates to individuals participating in the educational program.

Close cooperation will be maintained between this office and the district agents, county and home agents, and the state 4-H Club staff in promoting the electric program.

The Home Management department will cooperate in preparation of material and in promotion of the program.

WATER SYSTEMS

With over 96 per cent of our farms electrified, we still have only about 40 per cent of our farm families enjoying the benefits of running water. It is almost unbelievable that this necessity has lagged so far behind the general electrification program in North Carolina. All Extension field agents are emphasizing the need for running water more than they have in the past many years. We have continually called their attention to the fact that people usually buy what they desire the most, and lack of interest on the part of farmers is the main reason for not having running water in their homes.

MAJOR PROBLEMS:

1. Farmers' apparent lack of desire for the improvement.
2. Lack of income and improper use of income.
3. Large tenant population.

ACTIVITY GOALS:

19 Specialists days in field.

10 Specialists days in office.

100 Counties to participate.

8 Community or county-wide meetings conducted by specialists.

3 News articles.

METHODS OF PROCEDURE:

Agents will be encouraged to stress the need for farmstead water systems at special meetings and at general meetings. A few method demonstrations with dealer and plumber participation will be conducted.

COOPERATION:

Equipment dealers will be invited to participate at both educational meetings and at method demonstrations. Vocational teachers will be invited to attend and to participate.

FARM FENCING

The need for an educational program in fence construction is evidenced by the scarcity of good fence posts as well as properly constructed fences in North Carolina. Farmers are well aware of the expense of fence maintenance. For this reason it is possible to influence them through educational programs to construct better fences, and the quality of fences now being constructed is much better than the quality of fences constructed a few years ago.

The Extension Agricultural Engineering and the Extension Forestry Departments have jointly planned a series of fence post treating and fence construction demonstrations. Because of the success of a series of these demonstrations held during the past two years, the demand has been greater than we could meet. It is necessary again this year to cut down on the number of planned demonstrations; and in trying to reach a larger number of people with the limited time available, specialists of these two departments working cooperatively have made plans to establish nine permanent demonstrations. We are calling these demonstrations "Fence Post Length of Life Demonstrations". They will be described under Methods Of Procedure.

MAJOR PROBLEMS:

1. The general belief on the part of farmers that they are experts in fence construction.

2. Lack of good fence posts.

3. The high price of woven wire, and of treated posts.

4. The prevailing belief on the part of farmers that barbed wire fences are only temporary at best and should be so constructed.

ACTIVITY GOALS:

11 Specialist days in field.

12 Specialist days in office.

13 Counties to participate in 1955 demonstration program.

9 Fence post length of life demonstrations.

3 News articles.

3 Radio programs.

METHODS OF PROCEDURE:

The county agent or the district forester with the assistance of the county agent makes necessary provisions for installing a fence demonstration at the local fair grounds or at some other point where it will not be disturbed for a number of years and where farmers are periodically called together. The workers in the county, that is, the agent or the district forester, take the responsibility for obtaining one each of the posts commonly used in fencing by the farmers of that county. Where there are local treating plants, a sample of their posts are obtained; and if there are dealers for treated posts, even though they are treated out of the county, samples of their posts being sold farmers are obtained. A date is set when a specialist from the Extension Engineering Department and the Extension Forestry Department, with the agent and the district forester or other cooperation people from the county, meet for the purpose of setting up the demonstration. A short section of fence, usually 50 to 60 ft. in length, is installed. End posts are of the proper size and are properly braced. A good heavy woven wire is used, or five strands of clean No. 9 wire are used. The posts that have been obtained, representative of posts being used by the farmers of the county, are then set in the fence line. If there are enough different posts, it may be that they will be only about 5 ft. apart. A permanent sign, made by stamping letters and figures in

a piece of sheet aluminum and then nailing this to a piece of treated 2x8, is made describing each post and the date it is set in the line. These signs are securely attached to the wire at the post.

The idea behind this demonstration is that each year farmers coming to the fair or being called together for one reason or another have a chance to observe the posts, note the date they were set in the ground, and their general condition. When a post fails, the date of failure is stamped on the sign, and a similar post is set in its place, with a new sign being provided.

This demonstration, after several years have passed, will give the farmer a quick picture of how long those particular posts under those conditions lasted, and should be indicative to him of what he might expect under similar conditions. County agents and others are very pleased with the possibilities this type demonstration has.

COOPERATION:

At the college level a specialist from the Agricultural Engineering Department and one from the Forestry Department will install the demonstrations.

On the state and local level dealers of fencing equipment, wire, posts, etc., will be invited to furnish material and will be given credit in advertising.

The local agents will arrange the location, and in a number of cases vocational teachers will assist with the project.

GENERAL

4-H CLUB WORK:

Note the work planned in sections on Farm Machinery and Rural Electrification.

A farm and home safety record book was prepared jointly by an Extension Agricultural Engineering specialist and the Home Management specialist and was first used in 1954. This will be used in the future; and, in reality, 1955 will be its first major year. It is anticipated that this manual and record book will stimulate interest in 4-H safety projects. Considerably more time is being devoted to 4-H safety by the specialists of this department now than has been in the past.

FARM AND HOME WEEK, 4-H SHORT COURSE, AND THE STATE FAIR:

All members of this department will participate in conducting these three annual programs. Definite plans for these programs have not as yet been made for 1955, but each specialist in the department will spend a great many days in planning and conducting engineering activities during these programs.

SAFETY AND FIRE PREVENTION:

Each Extension specialist in Agricultural Engineering is responsible for promoting safe practices in his field of work. Information on the programs for Fire Prevention, Spring Clean-up, and National Safety Weeks will be distributed through this office. Requests for assistance in connection with special programs will be given where possible. While it is impossible to plan all such meetings a year in advance, members of this departmtne assist with conducting several general county meetings each year on such subjects as the organization of rural fire fighting organizations, safety programs, etc.

SPECIAL FARM ENGINEERING PROBLEMS:

There is a large variety of problems of an engineering nature that confront an Extension Agricultural Engineer on each trip to the field and in his office work. Many agent requests are received from field agents. A few of these problems are on general farm sanitation, the construction and management of farm ponds, county safety programs, farmstead planning, land clearing, special field days, etc. For such phases of an engineering program only tentative plans can be made, with a small allottment of time being taken into consideration.

A number of lines of work have been indicated in this general plan of work even though only a few days of planned time in the field have been allowed. These projects have been included because it is anticipated that they will grow in importance, and more time will be devoted to them in the future. It should not be construed that projects not now being given the attention that they deserve are not considered important by the specialists of the department. It is merely because in allotting time, emphasis must be placed on the lines of work that the general program demands assistance with during the current year.

A PLAN OF SPECIALISTS' WORK AT THE STATE LEVEL

Line of Work AGRICULTURAL ENGINEERING EXTENSION 1955

H. N. Ellis

List the number of days required by months for each type of work													
Write in Month and Specialist's name under each month	Preparation of Bulletins	Preparation of Educational Materials	Preparation of News and Radio Materials	Conferences in State and Out-of-State	Training Schools	Office Conferences and Correspondence	Preparing your Plan of Work	Preparing your Annual Report	Days Allotted to Field Work	Holiday	Annual Leave	Unallotted Office Time	Total Days For Month
December, 1954	0	2	2	2	0	5	3	2	5	6	0	0	27
January, 1955	0	2	1	2	4	9	0	1	7	0	0	0	26
February, 1955	0	2	2	4	0	7	0	0	7	0	0	2	24
March, 1955	0	2	2	3	0	7	0	0	11	0	0	2	27
April, 1955	3	2	1	2	0	7	0	0	8	1	0	2	26
May, 1955	8	1	1	1	0	6	0	0	9	0	0	0	26
June, 1955	5	2	2	1	0	8	0	0	8	0	0	0	26
July, 1955	0	2	2	2	0	7	0	0	7	1	5	0	26
August, 1955	0	2	2	2	0	9	0	0	6	0	6	0	27
September, 1955	0	2	2	2	0	6	0	0	8	1	5	0	26
October, 1955	0	2	2	5	0	11	0	0	3	0	0	3	26
November, 1955	0	4	2	2	3	7	0	0	7	1	0	0	26
TOTALS	16	25	21	28	7	89	3	3	86	10	16	9	313

A PLAN OF SPECIALISTS' WORK AT THE STATE LEVEL

Line of Work AGRICULTURAL ENGINEERING EXTENSION 1955

J. C. Ferguson

List the number of days required by months for each type of work													
Write in Month and Specialist's name under each month	Preparation of Bulletins	Preparation of Educational Materials	Preparation of News and Radio Materials	Conferences in State and Out-of-State	Training Schools	Office Conferences and Correspondence	Preparing your Plan of Work	Preparing your Annual Report	Days Allotted to Field Work	Holidays	Annual Leave	Unallotted Office Time	Total Days For Month
December, 1954	1	1	2	2	2	4	2	1	3	6	3	0	27
January, 1955	1	1	1	1	2	3	2	3	12	0	0	0	26
February, 1955	0	3	0	0	6	1	0	0	14	0	0	0	24
March, 1955	0	2	1	2	2	2	0	0	18	0	0	0	27
April, 1955	0	2	2	0	0	2	0	0	14	1	2	3	26
May, 1955	1	2	1	1	0	3	0	0	6	0	2	10	26
June, 1955	0	2	1	1	2	2	0	0	11	0	0	7	26
July, 1955	0	3	1	1	3	3	0	0	4	1	2	8	26
August, 1955	0	2	1	1	1	4	0	0	8	0	2	8	27
September, 1955	0	2	1	1	1	5	0	0	8	0	3	5	26
October, 1955	0	2	1	1	1	5	0	0	4	0	2	10	26
November, 1955	1	3	1	1	1	5	0	0	5	1	0	8	26
TOTAL	4	25	13	12	21	39	4	4	107	9	16	59	313

A PLAN OF SPECIALISTS' WORK AT THE STATE LEVEL

Line of Work AGRICULTURAL ENGINEERING EXTENSION 1955

R. M. Ritchie, Jr.

List the number of days required by months for each type of work

Write in Month and Specialist's name under each month	Preparation of Bulletins	Preparation of Educational Materials	Preparation of News and Radio Materials	Conferences in State and Out-of-State	Training Schools	Office Conferences and Correspondence	Preparing your Plan of Work	Preparing your Annual Report	Days Allotted to Field Work	Holidays	Annual Leave	Unallotted Office Time	Total Days For Month
December, 1954	0	0	1	6	0	5	2	1	6	6	0	0	27
January, 1955	0	3	0	2	2	5	0	2	10	0	0	2	26
February, 1955	0	3	0	1	1	4	0	0	11	0	0	4	24
March, 1955	1	4	2	2	0	4	0	0	9	0	2	3	27
April, 1955	0	4	1	0	0	5	0	0	9	1	2	4	26
May, 1955	0	5	2	0	0	5	0	0	9	0	0	5	26
June, 1955	0	5	1	3	0	4	0	0	8	0	0	5	26
July, 1955	0	0	2	4	0	3	0	0	10	1	6	0	26
August, 1955	0	5	1	0	0	5	0	0	11	0	0	5	27
September, 1955	0	5	2	2	0	4	0	0	9	1	0	3	26
October, 1955	0	5	1	0	0	5	0	0	7	0	0	8	26
November, 1955	0	5	2	0	0	4	0	0	5	1	2	7	26
TOTALS	1	44	15	20	3	53	2	3	104	10	12	46	313

A PLAN OF SPECIALISTS' WORK AT THE STATE LEVEL

Line of Work AGRICULTURAL ENGINEERING EXTENSION 1955

W. C. Warrick

List the number of days required by months for each type of work

Write in Month and Specialist's name under each month	Preparation of Bulletins	Preparation of Educational Materials	Preparation of News and Radio Materials	Conferences in State and Out-of-State	Training Schools	Office Conferences and Correspondence	Preparing your Plan of Work	Preparing your Annual Report	Days Allotted to Field Work	Holidays	Annual Leave	Unallotted Office Time	Total Days For Month
December, 1954	0	6	0	2	0	2	2	0	9	6	0	0	27
January, 1955	0	6	2	1	0	2	0	2	12	0	0	1	26
February, 1955	0	3	3	1	0	3	0	0	14	0	0	0	24
March, 1955	0	7	2	2	0	2	0	0	14	0	0	0	27
April, 1955	0	7	3	1	0	3	0	0	11	1	0	0	26
May, 1955	0	11	2	1	0	2	0	0	5	0	5	0	26
June, 1955	0	13	3	1	0	3	0	0	5	0	0	1	26
July, 1955	0	10	2	1	0	2	0	0	4	1	5	1	26
August, 1955	0	8	3	3	0	2	0	0	3	0	5	3	27
September, 1955	0	9	3	1	0	3	0	0	4	1	1	4	26
October, 1955	0	4	2	1	0	2	0	0	13	0	0	4	26
November, 1955	0	4	2	1	0	3	0	0	11	1	0	4	26
TOTALS	0	88	27	16	0	29	2	2	105	10	16	18	313

A PLAN OF SPECIALISTS' WORK AT THE STATE LEVEL

Line of Work AGRICULTURAL ENGINEERING EXTENSION 195 5

E. S. Coates

List the number of days required by months for each type of work

Write in Month and Specialist's name under each month	Preparation of Bulletins	Preparation of Educational Materials	Preparation of News and Radio Materials	Conferences in State and Out-of-State	Training Schools	Office Conferences and Correspondence	Preparing your Plan of Work	Preparing your Annual Report	Days Allotted to Field Work	Holidays	Annual Leave	Unallotted Office Time	Total Days For Month
December, 1954	1	3	3	4	0	2	3	0	5	6	0	0	27
January, 1955	1	4	2	1	0	2	0	3	13	0	0	0	26
February, 1955	3	2	2	4	0	1	0	0	12	0	0	0	24
March, 1955	1	4	3	2	0	3	0	0	14	0	0	0	27
April, 1955	1	4	3	1	1	2	0	0	11	1	2	0	26
May, 1955	0	5	1	1	0	4	0	0	13	0	2	0	26
June, 1955	0	2	1	6	1	0	0	0	11	0	5	0	26
July, 1955	0	5	1	0	0	4	0	0	9	1	6	0	26
August, 1955	0	8	3	0	0	5	0	0	9	0	0	2	27
September, 1955	0	8	1	0	0	5	0	0	10	1	0	1	26
October, 1955	1	6	3	0	0	5	0	0	11	0	0	0	26
November, 1955	1	5	1	3	0	7	0	0	7	1	1	0	26
TOTALS	9	56	24	22	2	40	3	3	125	10	16	3	313

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	RITCHIE	WARRICK	COATES	
DECEMBER, 1954							
Wilson	Agents training school - Irrigation	1					
Wake	Irrigation meeting	½					
Surry	Irrigation meeting	1					
New Hanover	Irrigation meeting	1					
Person	Irrigation meeting	½					
Surry	Farm Machinery		1				
Ashe	Farm Machinery		1				
Granville	Farm Machinery		1				
Wake	Home Remodeling			1			
Wilson	Tobacco school			1			
Forsyth	Tobacco school			1			
Alamance	Tobacco school			1			
Harnett	Housing school			1			
Sampson	Farm buildings			1			
Davie	Housing				1		
Edgecombe	Housing				1		
Nash	Housing				2		
Wilson	Housing				1		
Transylvania	Housing				1		
Jones	Housing				1		
Durham	Housing				1		
Franklin	Housing				1		
Stanly	Grain drying and storage survey					2	
Sampson	Grain drying					1	
Anson (N)	Rural electrification					1	
Iredell	Rural electrification					1	
JANUARY, 1955							
Edgecombe	Irrigation meeting	1					
Graham	Agents training school - Irrigation	1					
Forsyth	Agents training school - Irrigation	1					
Vance	Irrigation survey	1					
Farmville, Va.	N. C. dealers' meeting	1					

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	HITCHIS	WARRICK	COATES	
Columbus	Irrigation meeting	1					
Danville, Va.	Irrigation meeting - Chamber of Com.	1					
Wilson	Irrigation meeting	1					
Craven	Irrigation survey	1					
Pasquotank	Agents training school - Irrigation	1					
Craven	Agents training school - Irrigation	1					
College campus	Ag. Agencies Conference - Irrigation	1					
Richmond	Farm Machinery		1				
Chatham	Farm Machinery		1				
Edgecombe	Farm Machinery		1				
Franklin	Farm Machinery		1				
Wilson	Farm Machinery		2				
Davie	Farm Machinery		1				
Pamlico	Farm Machinery		1				
Halifax	Farm Machinery		1				
Cumberland	Farm Machinery		1				
Johnston	Farm Machinery		1				
Columbus	Farm Machinery		1				
Pitt	Housing meeting			1			
Anson	Housing meeting			1			
Sampson	Housing meeting			1			
Bladen	Housing meeting			1			
Harnett	Housing			1			
Cumberland	Housing			1			
New Hanover	Farm buildings			1			
Pitt	Farm buildings			1			
Edgecombe	Farm buildings			1			
Wayne	Farm buildings			1			
Davie	Housing				1		
Pitt	Housing				1		
Wilson	Housing				1		
Mitchell	Housing				1		
Sampton	Housing				1		
Durham	Housing				1		

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		WILLIS	FERGUSON	RITCHIE	WARWICK	COATES	
Lenoir	Housing				1		
Bertie	Housing				2		
Franklin	Housing				1		
Halifax	Housing				1		
McDowell	Housing				1		
Currituck	Rural electrification					1	
Pasquotank	Rural electrification					1	
Cumberland	Rural electrification					1	
New Hanover	Rural electrification					1	
Pitt (N)	Sweet potato curing and storage					1	
Craven	Rural electrification					1	
Pamlico	Rural electrification					1	
Tyrrell	Rural electrification					1	
Washington	Rural electrification					1	
Hertford	Rural electrification					1	
Granville	Rural electrification					1	
Lee	Rural electrification					1	
Moore	Corn storage					1	
FEBRUARY, 1955							
College campus	Farm managers meeting - Irrigation	1					
Cumberland	Irrigation meeting	1					
Orange	Irrigation meeting	1					
Campus/Col. Farms	Bankers short course	2					
College campus	Farm credit conference - Irrigation	1					
Surry	Irrigation meeting	1					
College campus	Farm press and radio inst. - Irriga.	1					
Sampson	Irrigation meeting	1					
Northampton	Irrigation meeting	1					
Scotland	Farm machinery		1				
Sampson	Farm machinery		1				
Robeson	Farm machinery		1				
Hoke	Farm machinery		1				

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	PITCHER	WARRICK	COATES	
Columbus	Farm machinery		1				
Anson	Farm machinery		1				
Rockingham	Farm machinery		1				
Person	Farm machinery		1				
Chatham	Farm machinery		1				
Haywood	Farm machinery		1				
Yancey	Farm machinery		1				
Vance	Farm machinery		1				
Wake	Farm machinery		1				
Catawba	Farm machinery		1				
Nash	Farm buildings meeting			1			
Person	Farm buildings meeting			1			
Vance	Housing school			1			
Randolph	Housing school			1			
Duplin	Housing school			1			
Wake	Farm buildings			1			
Sampson	Farm buildings			1			
Hertford	Farm buildings			1			
Yadkin	Farm buildings			1			
Davie	Farm buildings			1			
Granville	Water systems			1			
Onslow	Housing				1		
Burke	Housing				1		
Davie	Housing				1		
Wilson	Housing				1		
Jackson	Housing				1		
Madison	Housing				1		
Transylvania	Housing				1		
Randolph	Housing				1		
Rockingham	Housing				1		
Sampson	Housing				1		
Carteret	Housing				1		
Lenoir	Housing				1		
Franklin	Housing				1		

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	RITCHIE	WARWICK	COATES	
HALIFAX	Housing				1		
Perquimans	Electric hotbed					1	
Perquimans	Corn storage survey					1	
Pitt	Rural electrification					1	
Sampson	Rural electrification					1	
Alleghany	Rural electrification					1	
Jackson	Electric hotbed					1	
Yancey	Hay drying demonstration					1	
Lenoir (N)	Sweet potato curing					1	
Wayne (N)	Sweet potato curing					1	
Guilford (N)	Grain school - drying and storage					1	
Perquimans (N)	Electric hotbed					1	
Edgecombe (N)	Sweet potato curing and storage					1	
MARCH, 1955							
Chowan	Irrigation meeting	1					
Bertie	Irrigation meeting	1					
Beaufort	Irrigation survey	1					
Pitt	Irrigation demonstration	1					
Craven	Irrigation demonstration	1					
Greene	Irrigation demonstration	1					
Lenoir	Irrigation demonstration	1					
Iredell	Farm machinery		1				
Union	Farm machinery		1				
Nash	Farm machinery		1				
Granville	Farm machinery		1				
Bladen	Farm machinery		1				
Cleveland	Farm machinery		1				
Durham	Farm machinery		1				
Harnett	Farm machinery		1				
Cumberland	Farm machinery		1				
Yadkin	Farm machinery		1				
Durham	Farm machinery		1				
Ashe	Farm machinery		1				

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	RITCHIE	WARRICK	COATES	
Alleghany	Farm Machinery		1				
Cherokee	Farm machinery		1				
Watauga	Farm machinery		1				
Bertie	Farm machinery		1				
Edgecombe	Farm machinery		1				
Granville	Farm machinery		1				
Franklin	Housing meeting			1			
Graham	Housing meeting			1			
Hertford	Housing meeting			1			
Jones	Beef cattle field day			1			
Jones	Farm buildings			1			
Pender	Egg cooling room			1			
Wake	Farm buildings			1			
Duplin	Farm buildings			1			
Halifax	Water systems			1			
Davie	Housing				1		
Rowan	Housing				1		
Greene	Housing				1		
Wilson	Housing				1		
Transylvania	Housing				1		
Chatham	Housing				1		
Caswell	Housing				1		
Randolph	Housing				1		
Rockingham	Housing				1		
Durham	Housing				1		
Robeson	Housing				1		
Franklin	Housing				1		
Northampton	Housing				1		
Halifax	Housing				1		
Craven	Electric hotbed					1	
Dare	Rural electrification					1	
Jones	Sweet potato curing and storage					1	
Tyrrell	Corn storage surveys					1	
Vance	Rural electrification					1	

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	RITCHIE	WARRICK	COATES	
Wake	Rural Electrification					1	
Richmond	Crop drying and storage					1	
Randolph	Grain school - drying and storage					1	
Surry	Grain school - drying and storage					1	
Jackson	Hay drying demonstration					1	
Transylvania	Rural electrification					1	
Caswell (N)	Sweet potato storage					1	
Robeson (N)	Rural electrification					1	
Chatham (N)	Grain school - drying and storage					1	
APRIL, 1955							
Duplin	Irrigation demonstration	1					
Columbus	Irrigation demonstration	1					
Anson	Irrigation demonstration	1					
Alamance	Irrigation demonstration	1					
Harnett	Irrigation meeting	1					
Lee	Irrigation meeting	1					
Bladen	Irrigation meeting	1					
Pender	Irrigation survey	1					
Greene	Farm machinery		1				
Hertford	Farm machinery		1				
Martin	Farm machinery		1				
Pitt	Farm machinery		1				
Alexander	Farm machinery		1				
Polk	Farm machinery		1				
Craven	Farm machinery		1				
Gates	Farm machinery		1				
Vance	Farm machinery		1				
Martin	Farm machinery		1				
Bertie	Farm machinery		1				
Hertford	Farm machinery		1				
Person	Farm machinery		1				
Halifax	Farm machinery		1				
Graham	Silo construction demonstration			1			

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	RITCHIE	WARWICK	COATES	
Henderson	Silo construction demonstration			1			
Guilford	Silo construction demonstration			1			
Orange	Silo construction demonstration			1			
Person	Silo construction demonstration			2			
Wilkes	Farm buildings			1			
Iredell	Farm buildings			1			
Hertford	Water systems			1			
Burke	Housing				1		
Wilson	Housing				1		
Madison	Housing				1		
Randolph	Housing				1		
Wilkes	Housing				1		
Carteret	Housing				1		
Durham	Housing				1		
Lenoir	Housing				1		
Franklin (N)	Housing				1		
Robeson (N)	Water systems				1		
Polk	Water systems				1		
Lenoir	Grain drying and storage					1	
Rhaden	Rural electrification					1	
Sampson	Grain storage					1	
Durham	Hay drying					1	
Durham	Grain drying and storage					1	
Haywood	Rural electrification					1	
Jackson	Rural electrification					1	
Mitchell	Hay drying surveys					1	
Cumberland (N)	Rural electrification					1	
Greene (N)	Sweet potato curing and storage					1	
Richmond	Rural electrification					1	
MAY, 1955							
Wake	Irrigation demonstration	1					
Granville	Irrigation demonstration	1					
Franklin	Irrigation demonstration	1					

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	HITCHIS	MARRICK	COATES	
Beaufort	Irrigation demonstration	1					
Carteret	Irrigation demonstration	1					
Cherokee	Irrigation demonstration	1					
Jackson	Irrigation demonstration	1					
Haywood	Irrigation demonstration	1					
Buncombe	Irrigation demonstration	1					
Lenoir	Farm machinery		1				
Martin	Farm machinery		1				
Iredell	Farm machinery		1				
Person	Farm machinery		1				
Edgecombe	Farm machinery		1				
Wake	Farm machinery		1				
Cleveland	Silo construction demonstration			1			
Haywood	Silo construction demonstration			1			
Watauga	Silo construction demonstration			2			
Iredell	Silo construction demonstration			1			
Harnett	Farm buildings			1			
Chatham	Farm buildings			1			
Iredell	Egg cooling room			1			
Person	Water systems			1			
Burke	Housing				1		
Wake	Housing				1		
Madison	Housing				1		
Wilkes	Housing				1		
Lenoir	Housing				1		
Chowan	Rural electrification					1	
Currituck	Corn storage					1	
Warren	Grain drying and storage					1	
Harnett	Grain storage survey					1	
Sampson	Hay drying demonstration					1	
Cleveland	Grain storage meeting					1	
Stanly	Grain drying and storage					1	
Forsyth	Grain drying and storage					1	
Rockingham	Grain storage					1	

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	RITCHIE	VARRICK	COATES	
Durham (N)	Rural Electrification					1	
Alexander	Rural electrification					1	
Burke	Rural electrification					1	
Cabarrus	Rural electrification					1	
JUNE, 1955							
Wilkes	Irrigation demonstration	1					
Ashe	Irrigation demonstration	1					
Caldwell	Irrigation demonstration	1					
Mitchell	Irrigation demonstration	1					
McDowell	Irrigation demonstration	1					
Moore	Irrigation demonstration	1					
Union	Irrigation demonstration	1					
Robeson	Irrigation demonstration	1					
Pender	Farm machinery		1				
Duplin	Farm machinery		1				
Bladen	Farm machinery		1				
Wilkes	Farm machinery		1				
Bertie	Farm machinery		1				
Vance	Farm machinery		1				
Wake	Farm machinery		1				
Wayne	Farm machinery		1				
Rutherford	Farm machinery		1				
Chowan	Farm machinery		1				
Duplin	Farm machinery		1				
Beaufort	Silo construction demonstration			2			
Davie	Silo construction demonstration			1			
Madison	Silo construction demonstration			2			
Chowan	Housing meeting			1			
Burke	Farm buildings			1			
Catawba	Farm buildings			1			
Chowan	Housing				2		
Madison	Housing				1		

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 195 5

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	HITCHIE	WARWICK	COATES	
Transylvania	Housing				1		
Wilkes	Housing				1		
Bladen	Rural electrification					2	
Harnett	Grain drying and storage meeting					1	
Polk	Sweet potato curing and storage					1	
Durham	Crop drying and storage					1	
Wilkes	Grain school - drying and storage					1	
Durham (N)	Grain school - drying and storage					1	
Chatham (N)	Hay drying					1	
Franklin (N)	Grain school - drying and storage					1	
Cabarrus	Grain storage					1	
Iredell	Rural electrification					1	
JULY, 1955							
Orange	Irrigation demonstration	1					
Forsyth	Irrigation demonstration	1					
Yadkin	Irrigation demonstration	1					
Gaston	Terracing	1					
Cleveland	Irrigation meeting	1					
Rutherford	Irrigation	1					
Rutherford	Terracing	1					
Randolph	Farm machinery		1				
Alamance	Farm machinery		1				
Beaufort	Farm machinery		1				
Granville	Farm machinery		1				
Alamance	Silo construction demonstration			1			
Jackson	Silo construction demonstration			1			
Washington	Silo construction demonstration			2			
Mecklenburg	Silo construction demonstration			1			
Chowan	Farm buildings meeting			1			
Currituck	Farm buildings			1			
McDowell	Farm buildings			1			
Yancey	Farm buildings			1			

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	RITCHIE	WARWICK	COATES	
Transylvania	Farm buildings			1			
Burke	Housing				1		
Cleveland	Housing				1		
Wake	Housing				1		
Mitchell	Housing				1		
Camden	Corn drying and storage					1	
Currituck	Sweet potato curing and storage					1	
Pasquotank	Corn drying and storage					1	
Gaston	Corn drying and storage					1	
Northampton (N)	Sweet potato curing and storing					1	
Hertford (N)	Sweet potato curing and storing					1	
Ashe	Rural electrification					1	
Caswell	Grain storage					1	
Davidson	Rural electrification					1	
AUGUST, 1955							
Martin	Irrigation	1					
Washington	Irrigation	1					
Tyrrell	Drainage	1					
Dare	Irrigation of gardens	1					
New Hanover	Irrigation	1					
Brunswick	Irrigation	1					
Guilford	Farm machinery		1				
Haywood	Farm machinery		1				
Macon	Farm machinery		1				
Madison	Farm machinery		1				
Currituck	Farm machinery		1				
Dare	Farm machinery		1				
Perquimans	Farm machinery		1				
Alexander	Farm machinery		1				
Stokes	Silo construction demonstration			1			
Wake	Silo construction demonstration			1			
Durham	Silo construction demonstration			1			

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 1955

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		ELLIS	FERGUSON	RITCHIE	WARRICK	COATES	
Cleveland	Silo construction demonstration			1			
Edgecombe	Silo construction demonstration			1			
Lenoir	Silo construction demonstration			2			
Northampton	Sweet potato house construction dem.			1			
Beaufort	Sweet potato house construction dem.			1			
Harnett	Farm buildings			1			
Perquimans	Water systems			1			
Burke	Housing				1		
Polk	Housing				1		
Madison	Housing				1		
Beaufort	Sweet potato curing and storage					1	
Washington	Corn drying and storage					1	
Harnett	Storage survey					1	
Durham	Sweet potato storage					1	
Caswell	Rural electrification					1	
Person	Rural electrification					1	
Randolph	Rural electrification					1	
Wilkes	Rural electrification					1	
Yadkin	Rural electrification					1	
SEPTEMBER, 1955							
Durham	Fencing demonstration	1					
Rockingham	Fencing demonstration	1					
Surry	Fencing demonstration	1					
McDowell	Fencing demonstration	1					
Franklin	Fencing demonstration	1					
Vance	Fencing demonstration	1					
Edgecombe	Fencing demonstration	1					
Perquimans	Fencing demonstration	1					
Sampson	Farm machinery		1				
Lee	Farm machinery		1				
Rockingham	Farm machinery		1				
Davidson	Farm machinery		1				
Transylvania	Farm machinery		1				

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 195 5

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		KILBY	FERGUSON	RITCHIE	WARWICK	COATES	
Caldwell	Farm machinery		1				
Iredell	Farm machinery		1				
Robeson	Farm machinery		1				
Bertie	Sweet potato houses			1			
Lenoir	Sweet potato houses			1			
Pitt	Sweet potato houses			1			
Bladen	Farm buildings meeting			1			
Stanly	Farm buildings			1			
Surry	Farm buildings			1			
Caldwell	Farm buildings			1			
Alexander	Farm buildings			1			
Franklin	Water systems			1			
Pender (N)	Housing				1		
Johnston (N)	Housing				1		
Pitt (N)	Housing				1		
Wake (N)	Water systems				1		
Beaufort	Corn drying and storage					1	
Bertie	Sweet potato curing and storage					1	
Harnett	Rural electrification					1	
Harnett	Corn drying and storage					1	
Pender	Corn storage					1	
Lincoln	Grain school					1	
Mitchell	Rural electrification					1	
Wilson (N)	Sweet potato curing and storage					1	
Gates (N)	Sweet potato curing and storage					1	
Orange (N)	Sweet potato curing and storage					1	
OCTOBER, 1955							
Martin	Fencing demonstration	1					
Wayne	Fencing demonstration	1					
Jones	Fencing demonstration	1					
Pitt	Fencing demonstration	1					
Beaufort	Fencing demonstration	1					

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work _____ 195__

AGRICULTURAL ENGINEERING EXTENSION 5

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by ELLIS	PARKERSON	PITTMAN	WARWICK	COATS	Total Days to County
Jones	Farm machinery		1				
Pasquotank	Farm machinery		1				
Halifax	Farm machinery		1				
Edgecombe	Farm Machinery		1				
Harnett	Sweet potato houses			1			
Columbus	Yam festival			2			
Pender	Egg holding rooms			1			
Union	Farm buildings			1			
Anson	Farm buildings			1			
Guilford	Housing			1			
Pasquotank	Housing				1		
Franklin	Housing				1		
Person	Housing				2		
Onslow	Housing				2		
Bertie	Housing				2		
Sampson	Housing				2		
Wayne	Housing				2		
Franklin (N)	Housing				1		
Harnett	Sweet potato curing and storage					1	
Cleveland	Corn storage					1	
Cleveland (N)	Sweet potato curing and storage					1	
Pender (N)	Sweet potato curing and storage					1	
Hertford (N)	Rural electrification					1	
Martin (N)	Sweet potato curing and storage					1	
Duplin (N)	Corn storage					1	
Johnston (N)	Sweet potato curing and storage					1	
Columbus (N)	Sweet potato curing and storage					1	
Wake (N)	Corn storage					1	
Sampson (N)	Crop processing					1	
NOVEMBER, 1955							
Harnett	Irrigation	1					
New Hanover	Irrigation	1					
Moke	Irrigation	1					

A PLAN OF SPECIALISTS' WORK AT THE COUNTY LEVEL

Line of work AGRICULTURAL ENGINEERING EXTENSION 195 5

Write in counties to be served for the month	Description of work to be done in counties	Days devoted to work by					Total Days to County
		SIMS	PERSON	PITTS	WARWICK	COATS	
Beaufort	Irrigation	1					
College campus	Irrigation short course	2					
Chowan	Farm machinery		1				
Currituck	Farm machinery		1				
Pasquotank	Farm machinery		1				
Surry	Farm machinery		1				
Ashe	Farm machinery		1				
Columbus	Farm buildings			1			
Jones	Housing meeting			1			
Rockingham	Farm buildings			1			
Caswell	Farm buildings			1			
Chatham	Farm buildings			1			
Onslow	Housing				2		
Cleveland	Housing				2		
Granville (N)	Housing				2		
Montgomery	Housing				2		
Stanly	Housing				2		
Harnett	Water systems				1		
Graham	Rural electrification					1	
Macon	Rural electrification					1	
Watauga	Rural electrification					1	
Cherokee	Rural electrification					1	
Bertie (N)	Sweet potato curing					1	
Chatham (N)	Sweet potato curing					1	
Forsyth (N)	Sweet potato curing					1	

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING, NORTH CAROLINA COUNTIES AND UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

EXTENSION SERVICE

October 18, 1954

TO: LEADERS OF EXTENSION PROJECTS AND DISTRICT AGENTS

SUBJECT: Annual Narrative and Statistical Reports for 1954 and Plans of Work for 1955

FROM: C. B. Ratchford, R. W. Shoffner and Ruth Current

We have received suggested outlines for the annual plans of work and the annual reports from the Federal Extension Office. A copy of the suggested outline for your project is enclosed. The annual report and particularly the plan of work should be of more use to you than anyone else. If the suggested outline does not permit you to do a satisfactory job of planning and reporting your work, please feel free to make any changes you see fit. On the other hand, serious consideration should be given to using the suggested outlines as the Washington office frequently adds, and compares reports and plans of work for a particular project from the several states. Obviously, their job is easier if all states follow the same outline.

Deadline Dates for Reports:

We have been instructed by Administrator Ferguson to have all plans of work in Washington by January 1, 1955 and all statistical and narrative reports in by February 1, 1955. In order to meet these deadlines, we would like to have all specialists' plans of work in by December 28, and all annual reports in by January 24. We realize that in the past you have not received all county plans of work until December 15 or later. The district agents are going to make every effort this year to have the plans of work in your hands by December 1. While it will be impossible to have the county statistical reports summarized until after the deadline for your annual reports, Miss Schaub has volunteered to pull off a limited amount of information upon request and get this to you in time to include in your annual reports.

Reserve Week of November 22:

The week of November 22 is annual report and plans of work week for all county Extension workers. During this week you are requested not to make a schedule in counties so the Extension agents may complete their plans of work and annual reports on time. We suggest that you take advantage of this week to get your plans of work and annual reports blocked out so that you may meet the deadline suggested above.

Changes in Procedure:

Two changes are being made from the procedure followed last year. Inasmuch as we have been requested to submit two copies of the plan of work and annual report to Washington, please submit 3 copies of these reports this year.

Also, both plans of work and annual reports should be submitted to Mr. Fred Sloan rather than to this office.

See Mr. Sloan for Forms:

We have asked Mr. Sloan to prepare covers for plans of work and annual reports and any other forms which will be needed in the preparation of these reports. Please contact Mr. Sloan for this material.

As in past years, each leader will be held responsible for submitting plans and reports embracing all lines of work under his supervision.

C. B. Ratchford
Assistant Director

R. W. Shoffner
Assistant Director

Ruth Current
State Home Demonstration Agent

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS
U. S. Department of Agriculture and State Agricultural Colleges Cooperating

SUGGESTED OUTLINE FOR ANNUAL PLANS OF WORK OF SUBJECT MATTER SPECIALISTS

Indicate under Sections I and 4 how the work in this project has been and is to be further integrated into a broad State Extension program of work. Specific suggestions are given in this outline for listing and tabulating information in order to encourage definiteness and brevity.

I. ANALYSIS OF PROJECT SITUATION: State briefly facts showing project work needed; important changes and trends using pertinent data from Census, farm and home records, surveys, research, outlook material, county and State planning committee reports, etc. Show adjustments to changing requirements.

What additional information and cooperation are most needed?

2. MAJOR PROBLEMS: List without discussion the phases of work to receive emphasis this year.

3. NUMERICAL GOALS FOR CALENDAR YEAR: To indicate volume of work and possibility of reaching goals, compare in parallel columns the most important goals with results accomplished in previous year, grouped preferably by major phases of projects. List without discussion.

(a) Activity Goals: Such as number of training meetings, demonstrations, etc.; number of Extension agents and voluntary leaders to be trained.

(b) Result Goals: Such as number to adopt improved practices; increased acreage, or other measurable units to show results.

4. METHODS OF PROCEDURE: Under appropriate headings discuss the most important methods to be used, especially in planning with training county Extension agents, and leaders. Indicate, for example: effective motivating appeals and systematically planned demonstrations; new or unusual techniques to be used in teaching, including visual aids; how materials and services will be made available to facilitate adoption of recommended practices; assistance to be given in 4-H club work; farm and home development and methods to be used for evaluating project results.

5. COOPERATION: List in column (I) the names of State, Federal, and other agencies or other specialists that will cooperate; column (2) assistance to be given; and column (3) assistance to be received from the agency or individual. Include only definite cooperation agreed upon.

6. PUBLICATIONS, VISUAL, AND OTHER TEACHING AIDS: List titles and number of copies of all such materials (a) to be used, and (b) to be prepared, this year.

7. CALENDAR OF WORK: In the first column might be listed principal activities mentioned under Section 4; in the second, approximate total number of days to be given to each; and in the columns for months use stars or dashes to show approximate weeks when major activities will be carried on. a seperate calendar of work should usually be attached for each specialist.

8. OUTLINE MAP: Show distribution contemplated.