1932 - 1933

PLAN OF WORK

of

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Area Released from Cattle Tick Quarantine
North Carolina.

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By

L. I. Case, Agent in Animal Husbandry State College Station, Raleigh, N. C.

#### Pastures:

A continuation of work with pastures according to the following outline will be one of the main projects for 1932-1933.

Project: Pasture Studies.

Object: To study methods of pasture development for beef cattle and other livestock. (a) Methods and costs of pasture establishment. (b) Adaptation of varieties on various soil types. (c) Carrying capacity of various pasture plants, both improved and native. (d) Fertilization.

Method of Procedure: (a) Measured area to be disked, plowed, harrowed and otherwise carefully prepared. A like area to be roughly prepared perhaps by disking alone. Both areas to be seeded to similar pasture mixtures and treated the same as far as fertilizer is concerned. Cost records to be kept on each and results observed and recorded.

(b) Areas that are similar in soil type, moisture, etc., to be prepared and seeded to various pasture

mixtures. Adaptability of different varieties to different conditions and soil types to be observed.

- (c) Measured areas of pasture both improved and native to be grazed by cattle and gains recorded.
- (d) Measured plats of established pasture fertilized in the spring of 1931 according to diagram will be continued under observation. In some cases fertilizer applications will be repeated while in others results of previous applications will be observed.

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4-8-4 A.	M	. Mitrat	of 16% osphate A.	
500 lbs.	Chec	of Soda	Superplication of the series o	

## Pasture Fertilization. Bell Farm, Jones County.

It is planned to divide equally a permanent pasture of 14.2 acres in Jones County, fertilizer one-half at the rate of 400 pounds of 4-8-4 per acre and put nothing on the other half. Both areas will be grazed with cattle which will be weighed every 28 days or oftener.

# Value of Reeds. (Arundinaria tecta)

In the work done on the Blackland Test Farm, Wenona, North Carolina it has been definitely shown that Reeds are of great value for grazing cattle. However their definite carrying capacity has not been established. In order to throw more light on this subject a measured area of 10 acres have been fenced off this year, which will be grazed with steers of known weight. Records of gains for the entire grazing season will be kept.

## Strawberry Clover (Trifolium fragiferum)

It is planned to run a test to see if strawberry clover is adapted on marsh land along our eastern coast. It is to be tried on land that is over flowed occasionally by salt water.

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A \_\_\_ A - l acre-Little or no cultivation.

B \_ B - 1 acre-Good seed bed.

C - 1/4 acre--Fertilized with superphosphate at the rate of 400 pounds per acre.

### Gleaning and Grazing Studies:

The studies of gleaning corn and soy bean fields with cattlle will be continued on the W. W. Jarvis farm in Currituek County. As of the past two years. An outline of this project follows.

Object:

To study the carrying capacity of various crops and farm by-products in terms of livestock units. Also to study the practicability of carrying beef cattle and other livestock as a part of the regular farming program in eastern North Carolina.

Method of Procedure:

To use such cattle and other livestock as are available to graze summer pasture; (either native or improved), winter pasture consisting of winter cover crops, and to glean fields after crops have been harvested. Each crop that is to be gleaned or grazed to be of known area. The different crops that are harvested will be weighed or measured and yield determined. The kind, date of seeding, and other details concerning cover crops will be recorded and records kept as to stand and growth.

All livestock will be identified and weighed, (individual weights will be taken where practical) when they are turned into and out of each of the separate fields and pastures.

Similar studies of the carrying capacity of crops other than corn and soy bean stalks as outlined will be carried on should the

opportunity present itself. A limiting factor in this is that few farmers have scales on which stock can be weighed.

#### Establishment of Herds.

About two thousand head of breeding cattle were brought into eastern North Carolina during the falls of 1930 and 1931.

Others are preparing for cattle and will be given assistance in pasture establishment, the growing of winter feeds, selection and purchase of cattle, and housing as well as details as to care and management.

#### Feeding for Market.

Nearly forty car loads of cattle were finished for market in eastern North Carolina in 1931-1932. No doubt an equal or greater number will be fed this coming season. It is planned to institute a means for buying these cattle in quantities thereby saving overhead costs and too perhaps saving something on the purchase price thru buying in volume.

Assistance in feeding will be given, as many are novices and know very little about balanced rations or other details of proper feeding methods. It is hoped that several feeding records can be secured through which comparisons of various feeds and feeding methods in relation to gains and profits can be made.

# Better Bulls.

A high percentage of the bulls in service in eastern

North Carolina are of poor breeding and poor individuality.

Effort will be made to replace these poor animals with good pure-

breds. This is going to be difficult, however, for most farmers lack the financial means to purchase. In the past attempts have been made to hold auction sales but without success. This method of bull distribution will be tried again. Failing in this as many good bulls as possible will be brought in by private treaty.

#### Livestock Farm Incomes.

on hand.

An unsuccessful attempt was made in 1931 to get a record of income on a farm that had changed from tenants and cash crops to livestock.

Another cooperator has been secured and it is hoped results will be more successful. The outline of this project follows.

Object: To study incomes on farms where livestock raising is the main enterprise.

Method of Procedure: About January 1, 1932 to make an inventory of livestock, livestock buildings and equipment, and feeds

> Throughout the year keep a record of sales of livestock, livestock by-products, feeds and other farm products.

Records will also be kept as follows:

Labor cost, both man and horse,

Feeds raised and fed to livestock,

Pasture days and days on areas where

crops have been harvested.

At the end of the year a closing inventory will be made and profit or loss determined.

#### SHEEP

#### Ram Sales.

In 1931 one small ram sale was held according to the following plan: Rams were trucked to a designated point where the sale had been previously advertised. A value was placed upon each ram and the prospective buyer selected the ram or rams that suited his judgment and purse. This method worked very nicely and it is planned to extend it to other points the coming year. One state breeder of Hampshire sheep has agreed to cooperate with this department in this as long as his rams last.

## Feeding.

A rather large percentage of our market lambs grade low due to lack of finish. It is planned to attempt to improve feeding methods in so far as possible by means of news articles, circulars, meetings and personal visits.

Most of our sheep population is in western North
Carolina where little work has been done due to shortage of travel
funds. It is hoped that this condition may be remedied the coming
fiscal year, making it possible to start some work where the sheep
interest and possiblilities are greater than in the east.

#### Trimming.

The present large supply of lambs in relation to de-

mand makes the production of quality lambs of utmost importance.

Docking and castration of lambs intended for market will be stressed as one means of improving quality.

### Internal Parasite Control.

Stomach worms and other parasitic infestation are responsible for a large number of our lambs being of low grade. Therefore, systematic control measures will be emphasized during the coming year.

### Grading.

As a means of calling attention to all of the factors that relate to quality of market lambs it is planned to concentrate at various points, carlots of lambs. These lambs will be graded and sold on the grounds where possible—otherwise they will be marked and shipped to market. Attention will be called to the various factors which effect grades and ways and means of improving the grades another year will be pointed out.

# Publicity.

Realizing that limited time and travel funds make it impossible to reach but a small percentate of livestock growers individually every opportunity possible will be used to teach improved
practices by means of news articles and circular letters.

Respectfully submitted,

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