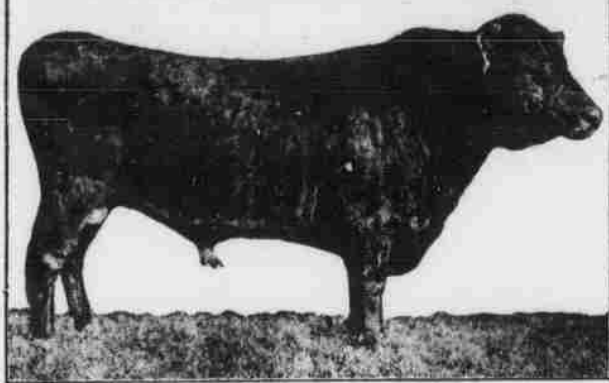


RAISE PROFITABLE BEEF IN THE SOUTH



Excellent Beef Type.

The South as a cattle country, helping in the not distant future to solve the problem of the high cost of living, may be the result of experiments carried on by prominent southern farmers, among whom is Senator Robert F. Broussard of Louisiana. Mr. Broussard has ideas. He had an idea that the South was capable of raising beef cattle in sufficient quantity to help solve the great problem of food supply, and he started experiments on his farm, about 150 miles northwest of New Orleans.

"It is my belief," said Senator Broussard, "that in the southern states beef cattle can be produced in quantities

sufficient to make it not only a profitable industry, but to help in the general scheme of making living as cheap as possible. There was a time when the South produced large numbers of beef cattle, and there is no reason now why the southern states should not raise cattle for food consumption.

"The sweet grass and fruits of Louisiana are highly adaptable for the production of beef cattle, because they are fattening. The cattle will fatten quickly. The South is destined, I firmly believe, ultimately to solve the problem of the high cost of living in the United States."

(Prepared by the United States Department of Agriculture.)

In the cotton-growing sections of the South comparatively few cattle have been kept, and they have not usually been regarded as profitable. Yet it is obvious to the farmer's advantage to be able to supply his family with an abundance of dairy products, and, if in addition, he raises calves that some one will wish to buy he will find that this can be done at little or no cost.

At the present time the United States does not produce enough meat to feed its own people; in consequence every calf worth feeding for beef can be sold for a good price. Ordinary cows, however, bred to a good bull will produce calves that are worth twice as much as those cows bred to any little scrub that may be near at hand.

For a good calf eight or nine months old, men who make a business of feeding cattle will pay from \$20 to \$30. These men, however, will not put themselves to the expense of hunting for such animals; they will buy only in neighborhoods where a number can be secured at one time. To obtain the best results, therefore, it is important that a whole community decide to improve its cattle. But where a start has been made the rapidly with which the idea spreads is remarkable.

Although the average farmer cannot afford by himself the expense of a good bull to breed his cows to, the organization of a bull club will enable him to secure the services of one at a comparatively low figure. For example, a good beef bull may cost \$150. Four of them would do for 200 cows, so that if a club be formed of men owning in the aggregate that number each would have to pay three dollars for each of his cows. The club may be divided into four sections or "blocks," and a bull assigned to each, the bulls being changed around at the end of every two years. In this way, if nothing goes wrong, it will be eight years before new purchases are necessary. The old bulls can then be fattened and sold.

In such a plan it is obviously necessary that the members decide to use the same breed and keep to their decision; otherwise at the end of a few years they will have a lot of cattle not much better than the scrubs they started with. Herefords, Aberdeen-Angus, Shorthorn (Durham), Red Poll or Devon all have their own qualities. The Herefords and Devons are the best grazers, but Shorthorn and Red Poll cows the best milkers. The Aberdeen-Angus are good grazers and fatten well. Farmers' bulletin 612, "Breeds of Beef Cattle," which can be had on application to the United States department of agriculture, contains information of use in reaching a decision, but the county agent, or the state agricultural college, should be consulted. The decision is an important one.

If, for any reason, the formation of a bull club is not possible, another way to get service to a good bull is to patronize one owned by some stockman in the neighborhood. Service fees of one to two dollars are usually charged. In the case of a club a somewhat smaller fee should be charged the members and paid into the club treasury. The man who keeps the bull should be allowed free service.

If it is worth while to have good cattle, it is worth while to take good care of them. The bull requires a good pasture for grazing and exercise, and during the breeding season enough grain to keep him in good condition. The grain should be fed about a month before the breeding season opens. At other times plenty of pasture in summer and cowpeas hay in winter with a liberal allowance of silage will be sufficient.

The cows also should have pasture during the summer, but this should be real pasture with Bermuda grass and lespedeza, and not a barren lot which offers only shade and water. The whole question of forage crops and pastures is, however, a most important

one for the South, and deserves special attention.

In addition to the pasture, if the cow is milked during the summer she should have some cottonseed or a little cottonseed meal, a little corn, or some other form of feed which may be available. In the fall and winter when the soil is dry, oats or some other cover crop will provide good grazing. At milking time she should have some good cowpeas, lespedeza or Bermuda hay and some cottonseed. Calves should be turned out on oats, rye, wheat, or crimson clover as soon as possible. The green feed will do wonders. Fuller details in regard to this whole question of beef raising on the farm are contained in the United States department of agriculture's farmers' bulletin 580, "Beef Production in the South."

HINTS ON RAISING PEANUTS

Valuable Crop in South and Southwest Overlooked by Many Farmers—Always in Demand.

Peanuts are a very valuable crop in the Southwest and South, where the soil is light and the climate friendly, but a great many farmers do not seem to know it.

The nuts can be raised more cheaply and more easily than corn and they always bring a good price.

Both horses and cattle are fond of hay, and it makes excellent roughage. Peanuts are one of the best crops going for boys, because they seem to take more interest in this than in any other crop on the farm—particularly if they are allowed to have the proceeds, which they should have.

The way to start is to get perfectly good seed. The nuts should be smooth, of good size, and free from any blemish.

In Kansas and Missouri the seed should be planted about the last of April, but in Virginia they are often planted earlier. Do not plant until the ground has become warm.

Plant two seeds in a hill, and make the hills three feet apart, or they can be planted in checkrows.

Keep the ground loose and mellow with cultivator and hoe until the plant begins to make little rootlike pods which later develop into nuts. After that all the work that is necessary is enough to keep down the weeds.

In the South many growers cover the bloom as soon as it develops, but in Kansas that is seldom done, and good crops are raised there.

Peanuts are harvested with a four-tined fork. The fork is stuck into the ground under the hill, which is then gently loosened up and pulled out with the hands.

The nuts should be placed in a dry room—the hayloft makes a good storehouse—and when they are thoroughly dry and clean they are ready for market.

Nuts should be put up in bags holding about one hundred pounds.

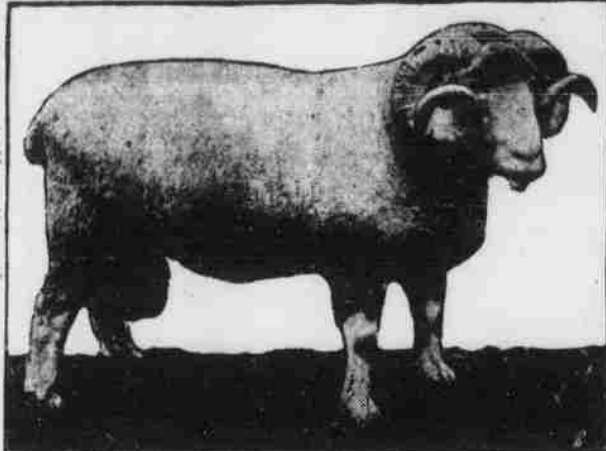
HARMFUL IN COTTON FIELDS

Innocent Looking Violets Afford Opportunity for Red Spider to Work—Eradication is Urged.

Violets growing around a cotton field seem to give another cotton pest, the red spider, an opportunity to work, and the agricultural department recommends the destruction of this harmless-looking flower to control the spiders. Other measures suggested as a result of investigations in South Carolina are the destruction of winter food plants and pokeweed around fields, the plowing of wide dust barriers around isolated infested places, and spraying with potassium sulphide.

Shelter the Machinery. The man who lets his plows stand in the field during the winter should remember that manufacturers have not yet discovered iron and steel that will not rust.

SHEEP HAVE IMPORTANT PLACE IN SOUTH



First Prize Yearling Dorset Ram.

(Prepared by the U. S. Department of Agriculture.)

Most farmers have, at some time or another, given some thought to the question of raising cattle and hogs. Sheep, however, are a less familiar idea to many. Nevertheless, sheep have an important place on southern farms. By keeping a flock of six to twelve ewes, the farmer can provide himself with meat for the table, have a few lambs for the market and secure additional revenue through the sale of wool.

Southern farmers who would like to get a start raising sheep may obtain interesting information from certain bulletins which may be had free of charge of the United States department of agriculture, Washington, D. C. The following may be applied for:

Farmers' Bulletin 576—"Breeds of Sheep for the Farm."

Farmers' Bulletin 509—"Forage Crops for the Cotton Region."

The first ewes can be native ewes, purchased from nearby sheep owners. Go into a flock and pick out vigorous ewes with compact bodies. Get young, healthy ewes. If you must buy old ones, do not take those having spread, broken or worn-off teeth. Such ewes cannot eat well and will make no money as breeders for their purchasers.

Do not use any but good rams of a mutton breed upon your ewes. A Southdown, Shropshire, Hampshire or Dorset Horn ram will prove most desirable. He should be about two years of age, healthy, and carry plenty of mutton. Such a ram will cost, delivered, from fifteen to twenty-five dollars, and can be bought by a half dozen farmers clubbed together. He will breed from forty to sixty ewes.

Sheep do not require closed buildings for protection from cold, as their fleeces do that if kept dry. A low shed built on dry ground and opening to the south, is sufficient. Such a shed need cost but very little, as scraps of lumber about the farm can be utilized in building it.

Place your flocks within a dog-proof inclosure at night, as dogs often attack and destroy sheep. A fence that will turn a dog must be at least fifty inches high, have a barbed wire stretched flat to the surface of the ground at its bottom and three barbed wires seven inches apart stretched at its top. The space between the barbed wires can be filled

with old boards, poles or any other fence-building material, provided it is so built as to keep the dog from crawling through.

Often ewes become "taggy" or have dungy locks collect on the wool about the tail and between the hind legs. Such locks should be cut off and the ewes kept clean about this part of the body.

Ticks and lice frequently infect sheep. Guard against this by dipping once each year in dips sold for this purpose. A rath barrel or tub can be used to hold the dip. Pick the sheep up bodily and work it around gradually in the dip until all parts are submerged and drenched to the skin.

Keep salt before the flock at all times. Sheep require a great deal of salt and it is essential for them.

Give the sheep access to all harvested and vacated fields, but do not depend entirely upon such forages. The ideal way is to provide lots of forages of such size as will pasture the flocks for only two-week periods during warm weather. By changing the pasturing ground of lambs every two weeks there is little danger of loss from stomach worms, as clean pastures do not infect sheep. Rape, cow-

peas, oats, vetch, crimson clover and soy beans should constitute the principal forages used. During the fall and winter permanent pastures can be used. Even regular fields of winter wheat and barley can be pastured without injury to them.

When pasture is not available feed hay or fodder to the flock. Keep up the appetites of the ewes by adding small quantities of rape, collards, chopped cabbage, or roots along with the hay. Do not feed roots to your rams or wethers.

Begin feeding the ewes a little grain about two weeks before lambing and gradually increase the amount to one-half pound daily at that time. After lambing, slowly increase the amount to one and one-half to two pounds daily, and continue this ration during the suckling period. Ewes need not be grain fed when dry if good pasture is provided.

Give the ram just enough grain to keep him in good condition. The amount fed should be increased during the breeding season.

Teach the lambs to eat grain as soon as possible after birth, and continually feed them what they will eat cleanly until ready for the market. Feed them twice daily, using creeps to keep out the ewes.

The following grain ration, generally available on the farm, is suitable for sheep: Corn, two parts by weight; cottonseed meal, one part by weight.

Probably August and September are the best months for mating, as this will bring your lambs in January and February. Do not leave the ram with the ewes continually, but take the ewes to him for a few minutes each morning. Allow only one service to a ewe during each period of heat, but be certain that the ewe gets in lamb before dropping breeding operation.

Watch the ewes carefully during the lambing season, but do not interfere with them unless necessary. All lambs are born, see that they are promptly dried and suckled. Frequently ewes disown their lambs unless forced to nurse them.

Give the ewes little, if any, grain ration for two or three days after lambing. At the expiration of this time it can be gradually given her until the full ration is reached.

In small flocks the fleeces can be most economically removed by using hand shears. After the sheep is shorn remove all tags and burs from the fleece, carefully roll it up inside out,

and tie neatly with cotton or paper string. If only a few fleeces are dry they can be placed in clean gunny sacks and sold to local dealers. If there is a woolen mill in your vicinity perhaps it will make your wool into cloth for you.

Now let us summarize the returns to be expected from six head of properly handled ewes. Such a summary will appear thus:

1. Four fat lambs ready for the table or market and weighing from 70 to 85 pounds when three and one-half or four months of age.
2. Two ewe lambs to remain in the flock.
3. One old ewe, culled for the butcher.
4. Six fleeces, giving 40 pounds of wool.
5. Increased valuation in flock due to improved breeding.
6. Increased fertility of soil due to forage crops and manure produced.
7. A new source of income provided for the farm.

Let the Flock Run.

The flock should be given the chance to run in the open yard on all fine days.



A Choice Lot of Spring Lambs in Tennessee.

RATIONS FOR WORK HORSES AND MULES



A Standardbred at a Government Remount Depot.

(Prepared by the U. S. Department of Agriculture.)

The selection of a ration for horses and mules in the South depends largely upon the kinds of feed available, the prices of the feed, and the amount and character of the work. For a 1,000 or 1,100 pound horse at moderate work a daily ration of from 10 to 12 pounds of grain and from 12 to 14 pounds of hay should be ample. At light work the grain ration should be increased. For a horse at moderate work weighing from 1,000 to 1,100 pounds the following rations will be found satisfactory. These rations are to be divided into three feeds. Nearly one-half of the roughage should be fed at night and the remainder divided between the morning and noon feeds. The grain may be divided into three equal portions, to be fed morning, noon and night:

Ten pounds oats; fourteen pounds mixed hay.

Ten pounds shelled corn or corn meal or twelve and one-half pounds



Percheron Stallion, Imported From France.

ear corn or corn-and-cob meal; fourteen pounds cowpeas hay.

Eight pounds shelled corn or corn meal or ten pounds ear corn or corn-and-cob meal; one pound cottonseed meal; ten pounds alfalfa hay; two pounds molasses.

Eight pounds shelled corn or ten pounds ear corn and cob meal; one and one-half pounds cottonseed meal; fourteen pounds mixed hay (Bermuda, lespedeza, etc.).

Six pounds shelled corn or corn meal or seven and one-half pounds ear corn or corn-and-cob meal; two pounds gluten; one and one-half pounds cottonseed meal; six pounds cowpeas hay; ten pounds corn stover.

The above rations are offered as suggestions and will have to be altered to suit conditions. If an animal is not doing well and is thin in flesh add more grain.

It may be found desirable to feed ear corn instead of shelled corn or corn meal. The ear corn, if desirable, may be ground and fed as corn-and-cob meal. One hundred pounds of ear corn or corn-and-cob meal is equivalent to about eighty pounds of shelled corn or corn meal.

For horses at light work the grain in the above rations should be reduced and the roughage increased in amount.

For wintering horses which have little, if any, work to do the foregoing rations may be used, with the grain reduced one-half or three-fourths, or the hay may be entirely eliminated if the hay is of good quality and the horses are easy keepers.

Salt should be provided so that the horse may have access to it daily.

Horses should not be fed or watered when they are hot. If a horse comes in very hungry it is better to allow him to eat hay for half an hour before he is given his grain. If he takes the sharp edge off his appetite on hay he will take more time to eat his grain and will masticate it better. In hot weather horses should be watered in the morning, in the middle of the

forenoon, before and after their dinner, and before and after their evening meal.

If possible, after the horses have finished their evening feed, they should be turned out in a lot where they can roll and get water at will during the night. This applies especially during hot weather.

The selection of a ration and general care of horses depends largely on local conditions, and the United States department of agriculture advises the farmer to get in touch with the county demonstration agent whenever he is in doubt regarding the best methods of handling stock. In case there is no county agent, the farmer should write the state agricultural station for information.

LACK OF A FEEDING SYSTEM

Responsible for Major Portion of Loss of Valuable Animals From Colic and Like Troubles.

(By W. H. DALRYMPLE, Louisiana Experiment Station.)

After an opportunity during the last 25 years of studying and observing conditions under which many of our work animals are fed, we have no hesitancy in saying that lack of system in feeding is responsible for the major portion of the loss of valuable animals from colic, inflammation of the bowels, etc.

Many who lose valuable mules on the plantations and farms from digestive troubles are wont to place the blame of the kind or class of feed the animals have been given; while, in reality, the blame properly belongs to the unnatural and unsystematic manner in which they receive their feed. A properly balanced ration of the very best quality of oats, when fed intelligently and systematically, may not induce a case of colic during the natural lifetime of the animal. But if the entire day's ration of oats is fed at one time, instead of it being divided into three parts, it is liable to so derange the digestive apparatus as to set up a fatal case of flatulent colic, because the digestive organs in the horse or mule are not constructed, or prepared, to "handle" such an excessive quantity of food material all at once. In such a case, we are to blame the oats for the trouble, or the unintelligent manner in which they were fed to the animal? And so it is with other kinds and classes of concentrated feeds; they require system in their administration to prevent indigestion, colic, etc., and to produce the best results in the capacity of the animal for work.

Dip the Sheep Regularly. Many farmers have the idea that after the sheep are shorn the ticks will abandon them. Certainly they do to some extent, but they immediately go to the lambs, where they find a comfortable nest and make life a burden to the youngsters. Buy a dipping tank and dip regularly twice a year.

COTTONSEED MEAL FOR EGGS

Substitute for Beef Scraps Should Be Kept Before Hens All the Time in a Self-Feeder.

(By F. C. HARE, Clemson Agricultural College.)

A dry mash for winter egg production in which cottonseed meal is used as a substitute for beef scraps to supply protein is made up as follows:

Cottonseed meal	100 pounds
Corn meal	50 pounds
Ground oats	50 pounds
Wheat bran	50 pounds
Wheat shorts	50 pounds
Ground lime rock	16 pounds
Ground charcoal	13 pounds
Salt	2 pounds

Keep it in the house before the hens all the time in a self-feeder, or in a low, flat box covered with slats or wire netting so the hens cannot scratch it out. The ground lime rock is fertilizer lime, not the burnt lime used for whitewashing. The ground charcoal can be left out if it cannot be readily obtained, but always add the salt.

This mash contains from 18 to 20 per cent protein, which makes it a food for egg production equal to the most expensive commercial egg mashes. It requires several days for the hens to become accustomed to this mash, but they soon develop a fondness for it and eat it greedily.