g Opportunity For Beef Cattle Raising In Tidewater Areas

ntain Section Has Always Been Splendid Grazing Land—Coastal Districts Coming Ahead

BY L. I. CASE
Specialist in Beef Cattle and Sheep

orial Note: This article was spec- written by Mr. Case for 'The State rmer Section of this newspaper.

Western North Carolina grass grows nantly on the mountain slopes and beef cattle have grazed contentedly the section was settled. Here beef and sheep, as a general thing, are able to utilize the grass and other that are grown. Here each fall thous- of steers are driven or shipped to feed in the Piedmont and eastern parts of State, or to Virginia and Tennessee they are fattened and then shipped the market. This industry has been in- ed with at times by advocates of other of farming but in spite of these inter- es it still stands out as the most ral type of farming in our rough ainous sections.

e number and quality of cattle in this on deterioated to some extent in re- years due to low prices and other fac- Now, however, the marked price im- ment that has come about since last has stimulated the interest in restocking ted ranges and improvement through se of better bulls.

FEWER IN PIEDMONT

Piedmont North Carolina beef cattle

cattle grazing on native reeds at the kland Experiment Station Wenona, shington County N. C. Photo courtesy nsion Service.

less prevalent than in any other section he State. However, on many farms beef e have been bred or fed successfully many years as an adjunct to the raising rton, tobacco and other cash crops. the present time this practice is on the rease and more cattle are being carried the purpose of consuming farm grown s and for the production of manure to ain the soil fertility.

one farm the keeping of a beef type for every acre of cotton grown, has been practice for the past fifteen years. In ition to receiving a good income from cattle as a separate enterprise, this mer states that his per acre yields of on have increased maerially as a result he change from cotton alone.

ere, where sufficient pasture can be wn economically, the keeping of cow ds and the fatetning of the calves at m 10 to 14 months of age offers a de- dable source of income. While on farms re the keeping of breeding herds does seem to fit into the program satisfactor- the purchase of feeder cattle from our ntain breeding grounds and fattening m for market may well be made a part the annual program. A recent survey in county in southern Georgia shows that e livestock have been introduced as a t of the farm program that the farm- in this county are now producing as ch cotton on 40,000 acres as they for- ly produced on 100,000 acres without stock.

IN TIDEWATER SECTIONS

n the coastal plains and tidewater sec- ns of our State beef cattle production ers the greatest opportunities for expan- n. Here thousands upon thousands of es of land are at present not producing ught to pay taxes while on many culti- ed areas tons upon tons of low grade ds are not being utilized. In this part the State beef cattle offer great possi- ties for increasing revenue when carried her on an extensive scale or as a sup- mentary enterprise. Expansion, never- less, should be made gradually and tiously, and careful planning for year und feed provision should precede the tle or disappointment may result. It is e that large numbers of native cattle now being run on native grasses during summer and on the beaches in the win- with no other provision for feed. Such thods, while producing some profit, re- t in only inadequate gains and there is doubt that the growing of supplemen- y feeds would prove profitable.

t the Blackland Experiment Station in shington County, native reeds are used carrying a herd of cattle for about

Trench Silo Offers Inexpensive Means Storing Green Feed For Dairy Herd

BY J. A. AREY, Extension Dairyman

THIS TYPE OF SILO has grown in popularity in North Carolina very rapidly during the past three years as shown by the number dug. During 1932, the first year this type of silo was used in the State, 41 were dug, in 1933 171 and in 1934, 372. Present indications are that there will be around 400 dug this summer.

The trench silo is an inexpensive type of silo. It is well adapted to the medium to small size herd on which the initial cost of the upright silo and the type of cutting equipment required to fill it is rather heavy. The labor cost on many of the trench silos already dug has been around 50 cents per ton. In many cases no actual cash was paid for digging since it was done during odd times by the regular farm labor. The material needed for the roof of an average size trench silo can usually be secured on the farm at small cost.

The construction of the trench silo is simple and can be accomplished with ordinary farm labor. The only tools needed consists of a plow, drag pan, shovel, pick and a team of mules or tractor.

The equipment required for filling the trench silo is less expensive than that required in filling the verticle silo since a small cutter without blower will do the work satisfactory. Such a cutter with a capacity of three to five tons per hour that can be operated with a 5 H. P. gasoline engine, now quoted at $75 to $100.

LOCATION

To give best results the trench silo should be located convenient to the place where the cattle are to be fed, and where good drainage is possible. The most desirable soil is a stiff clay free from rock. When possible it is best to locate the trench silo on a slope or hillside, digging the trench back into the hill. By giving the bottom of the trench a slight slope towards the lower end natural drainage can be secured. When a hillside location is not available, it is often possible to drain the trench by means of a small tile leading to a ditch or other lower elevation. Small stones should be placed around the intake so as to prevent silage from clogging the tile.

CAPACITY

The size of the trench silo should be determined by the number of animals to be fed and the length of the feeding period The depth mutiplied by the average width and that by the length will give the capacity in cubic feet. For example; a trench silo, six feet deep, seven feet wide at the top and five at the bottom (averaging six feet wide) and 70 long would equal 6x6x70 or 2520 cubic feet. The average weight of a cubic foot of silage from a trench silo is about 35 pounds. In this case the total weight would be 2520x35 or 88,200 pounds.

The number of cubic feet of silage needed can be determined by multiplying the number of cows to be fed by the number of days in the feeding period, since the average cow will consume a cubic foot of silage each day. For example, to feed a medium size herd of 24 cows 180 days would require 24x180 or 4320 cubic feet of silage.

The width and depth of the trench silo should also be governed by the number of cows to be fed daily. A slice of silage three to five inches thick beginning at the top and extending to the bottom of the silo should be fed daily in order to prevent spoilage. When the area represented by the width and depth is too large for the number of cows to be fed daily, excessive spoilage will take place. Capacity should be secured by increasing the length of the silo rather than the width or depth.

Table 1 gives te size of the herd, the suggested width, depth and length of the silo based on feeding a cow one cubic foot of silage daily for a period of 180 days.

Tabe 1—Suggested Demensions for Trench Silo

No. of Cows	Width At Top Feet	Width at Bottom Feet	Depth Feet	Length Based on 180 Days Feeding Period Feet
6	6	4	5	43
8	6	4	5	56
10	7	5	5	60
12	7	5	6	60
14	7	5	6	70
16	8	6	6	69
18	8	6	7	66
20	9	7	7	64
24	10	8	7	69

CONSTRUTION

After the location is determined measure off the desired area and mark each corner with a stake. Plow the land within the measured area and remove the loose dirt with a drag pan. When the land on which the silo is located is practically level the ends of the trench should be gradually sloped to the suface so that the team can walk in and out without difficulty. It is advisable to leave the slope in the end from which the silage is to be removed so that the silage can be hauled out in a cart. The other end should be dug out and given the same slope as that of the side walls. The side walls should be smoothed with pick and shovel. Loose soil, such as sand, will cave easily and when it is necessary to locate a silo in such soil the walls should be reinforced with concrete or lumbre. When lumber is used it should be thoroughly dried before erection. The plank should be placed in an upright position and not lengthwise with the trench and should be treated with hot creosote. The side walls, regardless of whether they be clay, concrete or plank, should be smooth so that the silage will pack tightly against them. If the walls are rough air pockets will be formed which will result in spoiled silage.

JOHN A. AREY

ROOF

A roof is not needed to preserve the silage, but is needed to prevent the walls of unlined trenches from crumbling due to weather action when the silo is empty. The kind of roof to build will depend upon the available maerial. On farms where inch plank are available an inexpensive roof of either gable or shed type can be constructed out of them.

FILLING THE SILO

Silage should be cut in 1-2-inch lengths since it packs better than if cut longer. The knives of the ensilage cutter should be kept sharp and adjusted close to the shear plate so that a clean cut will be secured.

The silage should be thoroughly packed by persons, animals or a tractor while it is being put in the silo. Special packing should be done around the walls. To aid in packing, and thereby improve the keeping qualities of the silage, water should be added to it continuously during the filling operation. This can be done convenienly with a hand sprinkler, or a water hose. If the cutter used has a blower attached, the water may be allowed to flow directly into the blower.

Regardless of the method used to distribute the water it is important to see that the silage next to the walls is thoroughly wet. Dry clay walls have a tendency to absorb moisture from the silage.

When the silo is completely filled, cover it three to four inches thick with a layer of cut straw, chaff, or other similar materials. Wet this material thoroughly and pack it well, then cover with 10 to 15 inches of soil. This should be wet and thoroughly packed. Packing should be repeated as silage settles so that all cracks and air pockets may be eliminated.

REMOVE THE SILAGE

To remove silage from a trench silo begin at the drainage end and first remove the sovering each day from the part of the silage to be fed that day. Beginning at the top and going through to the bottom of the silo a slice of silage not less than three inches thick should be removed from the end each day to prevent spoilage.

nine months of the year. From two to three acres are sufficient to graze a mature animal for this length of time if the season is normal. Calves running with their dams with no supplementary feed will usually weigh about 400 pounds at weaning time. There are thousands upon thousands of acres of this type of grazing that is not now being utilized and it is thought that eventually such areas will be more generally utilized for cattle grazing. This type of feed is too coarse for other types of livestock such as sheep or dairy cattle but beef cattle make admirable use of it.

Sheep Raising Gains In Popularity Among N. Carolina Farmers

Market Lambs And Wool As Adjunct To Balanced System Of Farming Is Recommended By Specialist

By L. I. CASE
Specialist, State College Station

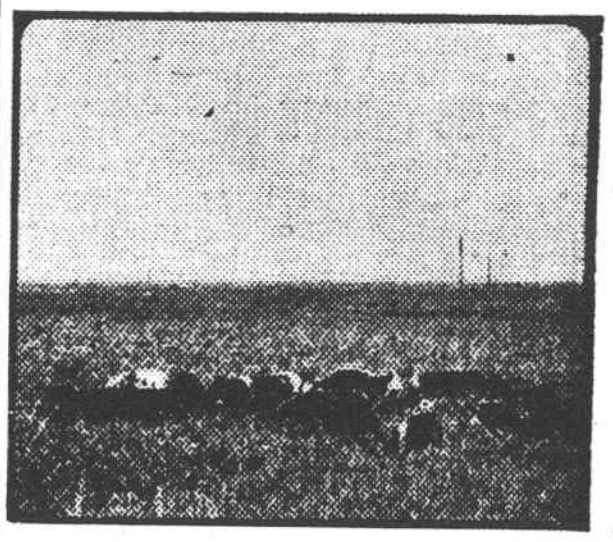
The production of market lambs and wool as an adjunct to a well balancel system of general farming has been and will no doubt continue to be one of the best paying branches of animal husbandry in North Carolina.

There is very little outlay necessary for a small flock and the sale of wool alone will often pay the cost of keeping the flock the entire year. The reason for this is that sheep in small numbers will make much of their living from waste products of the farm. Another thing, a small flock of sheep can be changed often from one part of the farm to another which practice helps materially in controlling parasites. The advantage of small farm flocks in comparison with larger ones cannot be over emphasized. The writer has seen so many instances of marked financial successes with small flocks while the same farmers have had difficulty when the size of the flocks were increased.

MUTTON TYPE FAVORED

The medium-wool or mutton type of sheep are the most practical in this State. The Hampshire breed predominates although we have a goodly number of Shropshires, Dorsets and Southdowns.

The northwestern counties have our larg-



Field Demonstration in selecting sheep for Exhibition, Waco, N. C. This sheep is pure bred Hampshire, a good general purpose breed.

est sheep populations, although the entire mountain area is near ideal for sheep growing on account of good drainage and climate. Then too, many of the extremely steep pastures are better adapted for grazing sheep than larger animals.

Piedmont and Eastern North Carolina presents many favorable opportunities for profitable sheep raising. In fact, some of our best flocks are found in these sections. Here an abundance of winter grazing crops can be provided, making it possible to breed for early lambs which can be put on the market ahead of the heavy run of lambs from Kentucky, Tennessee and Virginia, thus assuring a good price.

Marketing of lambs and wool is getting on a better basis than heretofore. Where these products are produced in sufficient quantities to justify, cooperative shipments and sales are resulting in more money to the farmer.

Cotton Acreage Is Between 27,515,000 And 29,973,000

Cotton acreage may not be quite so large as was expected earlier in the season, according to private estimates. At the beginning of the season both the U. S. Department of Agriculture and private estimators anticipated a big increase in acreage. As the season progressed it became evident that the plantings would not be up to expectations because of wet weather and other factors that interfered with planting.

The acreage for the total United States last year was 27,515,000 acres compared with 29,973,000 acres in 1933. At present private estimates indicate the acreage will be somewhere between these two figures for the coming season.