

# Managing Beef Cattle on East Texas Timberland

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IN MAY, 1949, the Southwestern Settlement & Development Corporation embarked on a cattle and range management program on its cut-over longleaf pine lands in Southeast Texas. The pasture unit started off with about 300 acres of improved and cultivated land, a carry-over from a company experimental farm, that had proved somewhat costly.

## PERSONNEL AND ADMINISTRATION

The range program has been directed by Mr. R. F. Evans, the Assistant General Manager of the company. The ranch is staffed with four full-time employees, one of whom is the foreman with a two year college background. The foreman and two men live at the ranch headquarters that is located ten miles south of Kirbyville, Texas, on U. S. Highway 96. The other employee lives on a newly fenced 10,000 acre range north of Jasper, Texas.

## PASTURES

There are approximately 500 acres of improved pastures and 30,000 acres of fenced open piney woods pastures divided into four separate units.

The purpose of the improved pastures is to provide first, our own hay, and second, supplemental feeding areas. Pastures to provide winter grazing are seeded

with clover and Italian rye grass and those for use in other seasons are seeded with Dallis grass, Bermuda grass and common, Kobe and sericea lespedezas.

The fertilizers used on these improved fields have been super-phosphate, potash and nitrogen. No definite system of application has been used, the only object being maintenance of fertility.

The cattle grazing is rotated over the improved pastures after the hay has been cut.

There has been no poison plant problem encountered to date on any of our forest ranges.

The cost of grass seed and fertilizer for the two year period has amounted to \$3900.00 on 500 acres, or \$7.80 per acre, of improved pasture. All of this expenditure was placed on improved fields from which stumps had been pushed and on which there were no trees or bushes.

On the open forest ranges, no range management, such as seeding and fertilizing of firebreaks, prescribed burning, etc. has been practiced. Fire lines have been plowed to prevent the spread of wildfires into the fenced forest ranges. Nearly all of the pastures have had the stumps pushed for wood distillation purposes. Salt and mineral troughs have been placed in the various pastures, and where no water was readily available year round, small ponds have been made. In addition, the improved pastures have stock feeding shelters. Range management practices will likely be more intensive as the program progresses in the next few years.

### FENCING

All exterior or boundary fences are hog proof fences with two strands of barb wire on top of the net wire. Creosote-treated posts have been used throughout except during this past summer when penta-treated posts were used. The reason for the change is that fence construction crews do not suffer from skin burns when handling penta-treated posts. Penta-treated posts also have better staple holding characteristics.

Some fence construction has been contracted but most has been built by company crews. A better construction job is done by company crews and has resulted in a small amount of maintenance only. Costs of contract fencing have averaged \$500.00 per mile. Company crew construction is somewhat more. This past summer a fencing job completed in very hilly country cost us \$1,020.50 per mile.

In 1951, a McCullough portable post-hole digger was used to very good advantage. Three men could dig from one to two miles of holes per day, depending on the kind, condition, and the texture of soil encountered. The power digger's advantage over hand digger's when the ground becomes dry and hard is very pronounced.

Some cross fencing has been done, but not enough to handle stock properly or to utilize the range forage fully. This will be done in the years to come.

The fencing of our pastures has not created any special forest fire problem so far. However, that does not mean that we may not have it in other counties where the company owns land. All of our fencing has been done in Jasper County, to date.

### LIVESTOCK

The company's cattle are of a mixed stock, consisting of three-eighths cross-

blooded Brahman with common Short-horn and Hereford stock. We have on hand now about 700 head. This type of cattle is big-boned, thrifty, a good hustler and is immune to most insects and diseases common to the hot humid summers of Southeast Texas. Bulls used for breeding purposes are registered Brahmans.

During the first year of cattle operation cows were bred throughout the year. In 1951, breeding was done only during May, June, July and August. The cows then start to calve in late February. The calf crop has averaged about 70 percent so far but should increase with more intensive range management. Such breeding practices as were initiated this past year mean cheaper stock handling costs, less supplemental feeding, and more weight per calf at weaning time, etc.

Cows will be bred at two years of age and kept for ten breeding seasons. The age of each cow is determined by a branded number on each animal that is related to the year it was born.

Total purchase of stock has been 568 head of which 107 head have been sold. We have had an increase of 433 and sold 194 head out of this increase. In December, 1951, we had 420 cows, 100 yearlings, 30 bulls and 150 calves. Select heifers will be retained to replace cull stock and to increase the herd as the pasture increases. Along this same line, the policy is to hold steer calves until two years of age before selling off as excess stock. The herd size will be governed by the area in pasture with an average of 20 to 30 acres per cow. About 100 to 150 head of stock are run year-long on each of the four forest range units now in operation.

The disease and insect problem has not been serious. Lice, mosquitoes, and flies are the only pests encountered and are combated by spraying with a solution of DDT and BRC powder from a mobile

power sprayer towed by a jeep or a light truck.

#### FEEDING

Forest range pasture units are used year round. No shelters or barns have been built in the forest pastures, there being an adequate number of pin oak ponds, timbered branches and patches of young timber for winter protection purposes.

The average consumption year round, is estimated at one pound per day per cow. Feed troughs containing minerals and a 50-50 mixture of cotton-seed meal and salt are put out the year round. During the winter months, hay and cotton seed pellets and in 1951, range cubes were used as supplemental feeds. Water is used wherever it can be found. In places where no water was available year round, small ponds have been built. Salt troughs have been placed near these watering places.

The cost of this supplemental feeding is estimated at about \$15.00 per cow per year.

#### FOREST AND GRAZING MANAGEMENT RELATIONSHIP

Because the grazing program has been running only two and one-half years and the intensive forest management program only one and one-half years, a good many practices such as the following, have yet to be put into effect:

1. Prescribed burning each year of 25 percent of each pasture unit to increase quality and availability of spring and early summer forage.
2. Seeded and fertilized firebreaks.
3. Prescribed burning for brown spot control in the pastures.
4. Construction of more cross-fences to better handle the stock and utilize the available forage to a higher degree than at present.

An increase of trained personnel and suitable equipment will take care of a good share of the above.

Costs and cattle production information from the program will be more complete in a few years permitting better range management.