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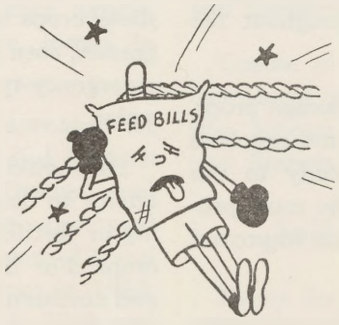
Planning Beats High Feed Costs

The high feed bills for hay and other roughage during the past winter are generally blamed on the early freeze last fall, the prolonged drought, and the severe northers during the winter months. Certainly, these events did reduce substantially the amount of winter pasture and cured range feed available for livestock. However, even in the areas hardest hit by these adverse weather conditions, some stockmen were able to carry their cattle through the winter in good condition without buying large quantities of feed.

How did these men—facing the same adverse weather—avoid paying a large "profit-robbing" feed bill? It was largely a matter of planning. Those stockmen were in this favored position because they had followed the practice of always keeping feed on hand. In fact, some stockmen began the winter with nearly a year's supply.



All livestock producers could develop a program for their operations that would reduce their annual feed bills materially. Roughage feeds can be stored easily on the farm or ranch, since they require very little protection from weather and in the drier sections of the Southwest can even be stacked in the open. Moreover, they do not deteriorate appreciably, even if kept for several years.

The first step in building such a program is to recognize that while pastures are the cheapest and most valuable source of livestock feed, the climatic conditions of the Southwest make it impossible to reply entirely upon this source of feed. Extended periods of drought and sudden severe winter storms are characteristic of this area. They may not occur every year and they usually vary considerably in their intensity, but they are a part of the usual weather pattern of the Southwest.

Having recognized that these weather conditions will force him to feed supplemental roughage during certain periods, the progressive stockman will make arrangements for such supplemental forage well in advance of the time it will be needed. Since he cannot predict the weather, this means he must keep on hand at all times a reserve supply of feed.

There are two ways to obtain this reserve supply of feed: (1) grow the feeds on the farm or ranch, and (2) purchase the feed from other farmers or dealers. Obviously, the latter method is the more expensive. However, most farmers and ranchers will find it necessary to buy some additional feed, particularly when their own production of such feeds falls short of expectations. In such cases, it is good business to buy this additional feed during the harvest season. It is easier to find good hay or bundle feed at harvest time, and the price is almost always lower at that time than after the drought or storm strikes, when everybody wants to buy feed.

Growing needed roughage feeds on the farm or ranch is usually the most profitable method of obtaining reserve supplies. Production of hay, silage, bundle feed, or other

roughage usually requires very little cash outlay, and the regular labor on the farm or ranch frequently is adequate to harvest and store such feeds.

Most stockmen will find it to their advantage to own the necessary equipment for harvesting forage crops. Saving in feed bills brought about by the use of such equipment frequently will pay a large part of its cost the first year. Custom operators can be used if they are readily available in the community, but considerable loss in quality of the forage crop may occur if harvest is delayed.

A wide variety of crops can be used to provide these home-grown roughages. Two of the most common in the Southwest are prairie grass and Johnson grass. Many acres of these two grasses are harvested each year for hay and, if cut at the proper stage of growth, make high-quality feeds. Both corn and sorghums are used extensively for silage, while cottonseed hulls frequently are used as a supplemental roughage feed throughout the Southwest.

The maximum production of forage crops, however, is obtained by farmers and ranchers who have given considerable study to the problem and who make use of the most productive forage crops and the latest improved growing methods.

The crops grown and the types of roughage stored—hay, silage, bundle feed, etc.—will vary from farm to farm, depending upon soil and climatic conditions and, to a lesser extent, upon the kind of livestock to be fed. For example, a west Texas rancher will follow a much different program than an east Texas dairyman, although their purposes will be the same—to keep their feed bills to a minimum. Nevertheless, the same general procedure can be followed by all stockmen in building a program to produce the maximum amount of home-grown roughages.

First of all, the farmer or rancher should estimate the kinds and amounts of forage required to meet the needs of the livestock on his farm or ranch. Most experienced stockmen have some rules of thumb to use in making these estimates. Dairy specialists at Texas A. & M. College suggest that dairymen store from 3 to 6 tons of silage for each cow. If only 3 tons of silage are stored, at least 1 ton of hay per cow should also be available.

Beef cattle under range conditions probably can be maintained for a year on about 3 tons of fair-to-good quality hay, plus about 700 pounds of cottonseed cake, even if no range feed is available. These requirements are very general and should be adjusted in the light of the farmer's and rancher's own experience and the recommendations of local authorities. It is advisable, however, when bumper crops are harvested, to store a little more than is needed, to insure a supply when crops fail.

After determining the amount of feed needed, the farmer or rancher should seek the advice of his county agent or other technically trained persons in determining the forage crops best suited to his farm. The list of these crops will nearly always include some grasses, corn or sorghums, legumes, and some emergency-type forage crops, such as sweet sudan.

He should also ask for additional technical advice to determine if the land requires liming or fertilization in order to produce these crops. For instance, in much of east Texas and northern Louisiana it is a waste of money and effort to seed improved grasses and legumes without first applying lime and fertilizer. On many farms some terracing will also be required. With the aid of this information, the kinds and amounts of forage crops to be grown can be selected and the actual field work necessary for their production begun.

The last step in the program to provide maximum roughage feeds is to build a place for their storage. As mentioned earlier, elaborate buildings are not needed. In many instances, hay can be stacked in the field and cattle permitted to self-feed from these stacks. If the hay is baled, it should be given

some protection from sun and rain, although it can be stored in the open for short periods. Silage can be stored in either an upright or pit silo, although the pit silo is much cheaper to construct and, if properly constructed, is just as efficient as the upright type.

Building such a program of forage production and storage should be a part of every stockman's long-range plan. It will enable him to maintain his long-run plan of breeding and livestock production without serious disruption due to adverse weather conditions. He can usually avoid disastrous liquidations of breeding stock and maintain a more uniform size of operation year after year. Moreover, he will be able to do this without costly feed bills.

Forage Sorghums for East Texas

Honey Drip—a variety of forage sorghum —gave the highest yields of silage and cured forage in tests conducted at the Nacogdoches Experiment Station in 1949 and 1950. Thirteen grain and forage sorghum varieties, sudan grass, Texas 28 corn hybrid, and Star millet were tested in these experiments.

Honey Drip sorghum yields averaged 21 tons of silage per acre in 1949 and 30 tons in 1950. Atlas, Straightneck, Orange, and Gooseneck—also forage sorghums—produced per acre yields that ranged between 12 and 16 tons in 1949 and 15 to 22 tons in 1950. Black Amber produced 10 tons in 1949 and 15 tons in 1950.

Other varieties tested at the Station and their average yields include Hegari, Sagrain, Darso, and Early Hegari—9 to 12 tons in 1949 and 14 to 19 tons in 1950; Bonita—7 tons per acre in 1949 and 14 tons in 1950; and Texas Blackhull kafir—21 tons per acre.

These yields of silage from sorghums compare with yields of 8 to 10 tons from sweet sudan, 11 tons from Texas 28 corn hybrid, and 13 tons from Star millet.

Yields of cured forage were also highest from Honey Drip sorghum, but the height and coarseness of the plants make it difficult to cure as hay. Therefore, one of the smaller varieties, such as Hegari, is usually recommended for cured forage.

Save Money With Silage

A full silo is good feed insurance and, next to pasture, is the cheapest source of feed, say Texas A. & M. College dairy specialists.

A new Texas Extension Service bulletin, entitled "Silage for the Dairy Herd," points out that according to recent cost studies, 100 pounds of total digestible nutrients (the feeding value of a feed) from silage costs $1.40, compared with $3.00 from alfalfa hay and $5.40 from a concentrate mix. Also, 1 ton of silage, costing $4 or $5, is equal in feeding value to about 500 pounds of 16-percent protein grain mix, costing $17 or $18.

In addition to discussions of the advantages and costs of silage, the bulletin contains information on silage crops, different types of silos, harvesting silage crops, filling silos, and feeding silage.

Copies of this bulletin may be obtained from local county agents or from the Extension Service of Texas A. & M. College, College Station.

Soil Building in 1951

Every farmer and rancher in the Southwest should carry out at least one soil-building practice during 1951.

Seeding legumes and improved pasture grasses, applying lime and phosphate, building terraces, and constructing farm tanks are all practices that will pay big dividends in increased crop yields and more productive pastures.

The cost of making most soil-building improvements is relatively small, and the cash outlay required can often be reduced materially through the use of regular farm labor and machinery. Moreover, many of these practices have been approved for pay-

ments under the Production and Marketing Administration's program. Farmers and ranchers should check with their local PMA committees now and find out what practices are approved for their area and make plans for improving the productivity of their farm this year. Application for these payments under the PMA program should be made as early as possible, in order to insure payment under the 1951 program.

A 7-Step Peanut Program

The success of a 7-step cotton program for increasing income from cotton has prompted the Texas Agricultural Extension Service and other interested agencies to develop a 7-step program for growing peanuts. Details of the program are given in a leaflet, L-122, entitled "Seven Steps to Help You Get Higher Yields and Greater Profits in Growing Peanuts."

STEP 1—Fit Peanuts into Balanced Farming

One-crop peanut farming is uneconomic and usually unprofitable, so the program suggests that farmers fit peanuts into a crop rotation that includes other cash and feed crops and pastures and a farm program that includes livestock. Such a plan will make most efficient use of land, labor, farm equipment, and work stock.

STEP 2—Take Care of Your Soil

A productive soil is the basis of the farm's prosperity, and step 2 of the 7-step program for peanuts urges farmers to build soil fertility through the use of legumes, crop residues, and fertilizers.

STEP 3—Plant Good Seed, Properly Treated

Plant only recommended varieties and in sufficient quantity—usually 30 pounds of shelled nuts or 60 pounds of unshelled. Treat shelled seed with ceresan to insure good stands and to reduce disease.

STEP 4—Control Diseases and Insects

Southern blight is the most destructive disease affecting peanuts in the Southwest, and farmers are urged to plant peanuts only on disease-free land and to use only disease-free seed. Other diseases, such as peanut leaf spot, and insects can be controlled by proper applications of insecticides (details can be obtained from county agricultural agents).

STEP 5—Make Your Labor Count

Labor is one of the biggest costs in the production of peanuts, and increasing per-acre yields will lower the labor cost per bushel of nuts harvested.

STEP 6—Harvest and Thresh for High Grades

Low-grade peanuts seldom return a profit, and farmers should make every effort to maintain a high grade by using proper harvesting methods and keeping the harvested nuts as free as possible from dirt, sticks, and trash.

STEP 7—Know and Sell for Grade and Variety Value

Sell the crop on a grade basis, in order to take advantage of higher prices for better grades. Learn to know the grade and value of the crop you produce.

Publications

Texas Agricultural Experiment Station, College Station:

A Handbook of Peanut Growing in the Southwest, Bulletin 727. (Published jointly with Oklahoma Agricultural Experiment Station—Bulletin B-361).

Rapid, Low-Cost Conversion from Rice to Improved Pastures, Bulletin 729, by James B. Moncrief and Ralph M. Weihing.

The *Agricultural News Letter* is prepared in the Research Department under the direction of CARL H. MOORE, Agricultural Economist.