

# FARM AND RANCH BULLETIN

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## BROILER FINANCING AND RETURNS

By early 1956, most Texas broiler producers were operating under guaranteed financing plans. Competition has forced many feed dealers to offer financing plans which reduce some of the risk to the growers, according to a study by Harley Bebout, Assistant Professor of Agricultural Economics with the Texas Agricultural Experiment Station.

While there are some differences in the production costs incurred by growers operating under the various broiler financing plans offered by dealers, each of the plans necessarily increases the cost of production over a cash operator's cost. The increase results from the necessity of making a financing charge, which reflects the risk assumed by the dealer. Under any of the *guaranteed or fixed-income plans*, the producer does not actually pay any of the higher costs. The dealer is compensated in the form of higher chick and feed prices charged to the grower and, in some instances, by the addition of extra financing charges.

### Open-Account and Cash Growers

In Mr. Bebout's analysis of cash and open-account growers, special attention is given to the amount of money a grower saves by paying cash for his chicks, feed, and other necessary production items. (Under the open-account plan, the grower purchases chicks, feed, medicine, and other supplies from his dealer on open account and pays the account when the broilers are marketed.) In the case of any of the financing plans, dealers eventually must recover their costs of doing business, in addition to the cost

of items supplied their growers. Under competitive conditions, dealers often charge the chicks and feed to their growers at prices sufficiently above cash prices in order to cover the added risk under the various financing arrangements with the growers.

Records were obtained from producers on 84 cash broods and from producers and dealers on 45 open-account broods. The average size brood, the average age of birds at time of sale, the average weight per bird, and the feed-conversion records were practically the same for both open-account and cash producers. The mortality rate of birds was slightly less for the cash producers. Thus, production efficiency appeared to be about the same for both types of growers. Dealers provided the same service for their cash producers as for the growers they financed.

The comparison between costs of feed and chicks showed significant differences. The open-account producers paid an average of \$5.19 per hundredweight for feed, whereas cash producers paid \$4.88. The open-account growers paid an average of 16.39 cents per chick started, while the cash producers paid 15.10 cents. On the basis of these data, a cash producer could save approximately \$24 in feed costs and \$13 in chick costs, or a total of \$37 per 1,000 3-pound birds produced, by paying cash for feed and chicks.

### Cost Per Pound

On the basis of cost per pound, little difference was found in the cost of production items

other than chicks and feed. The cost for fuel, electricity, litter, medicine, vaccine, and insurance was slightly higher for the open-account producers, whereas the cost of hired labor was a little more for the cash producers. These figures did not include interest on the grower's investment, depreciation, taxes, or other overhead costs.

The cost of the open-account lots grown ranged from 19.64 cents per pound to 21.89 cents, or an average of 20.42 cents. For the cash lots, the range was 17.13 cents per pound to 25.32 cents — an average of 19.41 cents. Excluding hired labor, the average cost was 20.26 cents per pound for the open-account lots and 18.89 cents for the cash lots.

#### Prices Received

In the A. & M. studies, cash growers received slightly higher average prices for their broods than did open-account producers. However, Mr. Bebout points out that if records could have been obtained on a larger number of

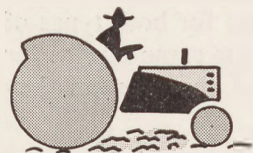
broods for both types of growers, the data probably would reveal little difference in prices received by each. Dealers generally sold the broilers for both their cash and credit customers, with no evidence of differences in prices received by growers.

#### Returns to Growers

The average return to the open-account growers was approximately 2.52 cents per pound, or 7.54 cents per bird. The return to the cash growers was 3.95 cents per pound, or 11.84 cents per bird. Thus, the open-account growers received \$75.40 per 1,000 birds, while cash growers received \$118.40. When adjustments were made for price difference, the cash growers received \$30.40 more per 1,000 birds than did the credit growers. During periods when returns fail to cover cash or open-account production costs, the grower would find it advantageous to operate under one of the guaranteed-income plans offered by dealers, according to Mr. Bebout.



### Farm Machinery Replacements



Keeping a farm properly mechanized is a major job which requires sound advance planning to insure replacement of needed equipment, points out the United States Department of Agriculture. Careful analysis of current equipment inventory, as a basis for future purchasing, will help farmers avoid the financial hardship that may result from an unexpected need to replace an expensive machine.

The USDA says that most farm machinery must be replaced eventually and that waiting until it wears out or breaks down before making plans for replacement is poor business. Instead, farmers are advised to put on paper a long-range replacement program for meeting equipment needs as they arise.

Detailed information concerning a farm machinery replacement program is contained in

USDA Leaflet No. 427, entitled *Planning Farm Machinery Replacements*. Single copies of this publication may be obtained, without charge, from the Office of Information, United States Department of Agriculture, Washington 25, D. C.

### Plant Nutrition . . . and Insect Control

Preliminary experiments by United States Department of Agriculture scientists indicate the possibility of a correlation between furnishing plants the nutrients required for optimum growth and successful control of spider mites attacking such plants. The experiments were conducted by Thomas Henneberry, Entomologist, and N. W. Stuart, Plant Physiologist, at the USDA's Agricultural Research Center at Beltsville, Maryland.

The scientists found that spider mites attacking pole lima beans were easy to kill with malathion when the beans were supplied with proper amounts of nitrogen, phosphorus, and potassium for good growth. On the other hand, they



found mites generally harder to kill on plants receiving either more or less than the needed amounts of each nutrient.

The USDA experiments indicate that resistance to insecticides by insects and mites actually may represent changes in susceptibility caused by variations in plant nutrient levels. Subsequent experiments may help to determine the advantage of timing insect-control practices with seasonal variations of nutrients in plants. Further work will include study of the possible effects on mite susceptibility of plant-growth variations produced by variations in light and temperature.

## New Potato Grading Standards



Potato growers and handlers will be operating under a new schedule of grading standards on July 15, according to the United States Department of Agriculture. The revised standards, which are the first major changes in potato grades in 25 years, were developed by the USDA in close cooperation with trade representatives.

Under the new standards, there will be no U. S. Extra No. 1 grade of potatoes. Instead, there will be a newly defined U. S. Fancy grade, similar to the former U. S. Extra No. 1, except that it calls for higher requirements for maturity, shape, and cleanness. Changes in size classifications also are included, and tolerance for oversize is reduced from 15 percent to 10 percent.

Copies of the new standards may be obtained from the Fruit and Vegetable Division, Agricultural Marketing Service, United States Department of Agriculture, Washington 25, D. C.

## Pros and Cons of Stubble Mulching

Stubble mulching — the practice of leaving crop residues on the soil surface — is proving generally successful in semiarid sections of this country for maintaining crop yields and for controlling water and wind erosion, according to the United States Department of Agriculture.

Through the use of stubble mulching, erosion from rainfall in some areas of the United States has been reduced to about 20 percent of that occurring from moldboard-plowed surfaces. Tests also indicate that various types and amounts of anchored crop residue can remove up to 99 percent of the wind's force at the soil surface.

Compared with moldboard tillage, stubble mulching in semiarid regions has —

1. Improved the soil from the standpoint of water infiltration and tilth.
2. Resulted in somewhat higher soil-moisture content.
3. Tended to check the decline in organic-matter content of soils.
4. Lowered soil nitrate slightly.
5. Resulted in small yield increases.
6. Reduced protein content of wheat about 0.05 of 1 percent.
7. Produced slightly less wheat straw, thereby lowering the straw-to-grain ratio.
8. Increased the weed problem in some cases.

One frequent malpractice of mulch tillage has been excessive working of the soil. Such overtillage tends to destroy the residue cover, to pulverize the surface soil, and, in general, to nullify the benefits of stubble mulching. Another mistake has been that of maintaining a constant depth of subsurface tillage, rather than varying the depth. This results in compacted soil immediately below sweep depth. Occasional use of a chisel-type implement to break up the compacted soil is recommended.

The USDA report shows that stubble mulching needs further development in some areas. The practice has lowered yields and has caused other problems in the humid regions of the East and in some of the more humid western sections. However, soil scientists with the Department of Agriculture believe that the advantages of stubble mulching can offset the disadvantages, and are working to perfect one of the most valuable techniques ever devised for better farming and more effective soil conservation in areas with low rainfall and high winds.

## High Drying Temperatures Damage Corn

Farmers and elevator operators who damage corn by permitting it to reach too high a temperature during artificial drying may find that they cannot sell the grain to the industrial market, warns the United States Department of Agriculture.

When corn is overheated during drying, it becomes unfit for industrial and food processing. The value of corn for starch production is lowered considerably if the grain reaches a temperature of 140° Fahrenheit. In addition, commercial processors find it difficult to remove the germ portion of the kernels, and corn oil output and quality are lowered.

USDA scientists point out that processing corn that has been dried at too high a temperature is "like trying to beat a hard-boiled egg." Many corn processors hesitate to purchase artificially dried grain because of the strong possibility that it may be damaged.

## Artificially Bred Dairy Cows Increasing



the Nation are so bred.

The number of dairy cows bred artificially from sires that have demonstrated superior breeding qualities has risen until, today, more than a fourth of the dairy cows in

The Texas Agricultural Extension Service reports that over 6 million dairy cows in the United States were bred artificially in 1957. In Texas, 28,671 cows were bred artificially last year, or 3.6 percent of the state total.

Sires used for artificial breeding are proved on the basis of their ability to pass along to their daughters a capacity for high milk output. Information concerning artificial breeding service can be obtained from local county agricultural agents.

The sting nematode — one of the more damaging nematodes in the southeastern states — recently was found in Texas corn fields, according to Don C. Norton, Assistant Professor with the Texas Agricultural Experiment Station.



## Publications

Texas Agricultural Experiment Station, College Station:

*Marketing Texas Goats*, Bulletin 844, by A. W. Tieken and John G. McNeely.

*Greenbugs and Some Other Pests of Small Grains*, Bulletin 845, by N. E. Daniels, H. L. Chada, Donald Ashdown, and E. A. Cleveland.

*Seasonal Price Change and Commercial Storage Costs of Rice*, Bulletin 848, by Clarence A. Moore and Howard S. Whitney.

*Rice Supply, Demand and Related Government Programs*, Bulletin 850, by John A. Kincannon.

*Onion Varieties in Texas*, Bulletin 854, by Bruce A. Perry and Henry A. Jones.

*Processing Texas Broilers*, Bulletin 857, by G. J. Mountney and F. A. Gardner.

*Storing Flaxseed in Farm-type Bins in South Texas*, MP-172, by J. W. Sorenson, M. G. Davenport, and G. L. Kline.

*Requirements for Grain Sorghum Irrigation on the High Plains*, Bulletin 846, by Norris P. Swanson and E. L. Thaxton, Jr.

*The Feasibility of Processing Wool and Mohair in Texas*, Bulletin 852, by Jack B. Taylor.

*Marketing Texas Green-wrap Tomatoes*, Bulletin 861, by H. B. Sorensen.

Copies of these bulletins may be obtained by request to the experiment station.

The FARM AND RANCH BULLETIN is prepared in the Research Department under the direction of J. Z. Rowe, Agricultural Economist.