COW TESTING ASSOCIATIONS

By R. N. DAVIS, Extension Dairyman

THE average dairy cow in the United States produces about 4000 pounds of milk and 160 pounds of fat per year. The average production for Arizona will not exceed this amount. In Arizona a cow properly fed and cared for should produce at least 250 pounds of fat a year to be profitable. It is very evident, therefore, that the average production of the cows in the State must be raised if the dairymen as a whole are to be prosperous. The average production can be raised by better feeding and breeding and intelligent culling.

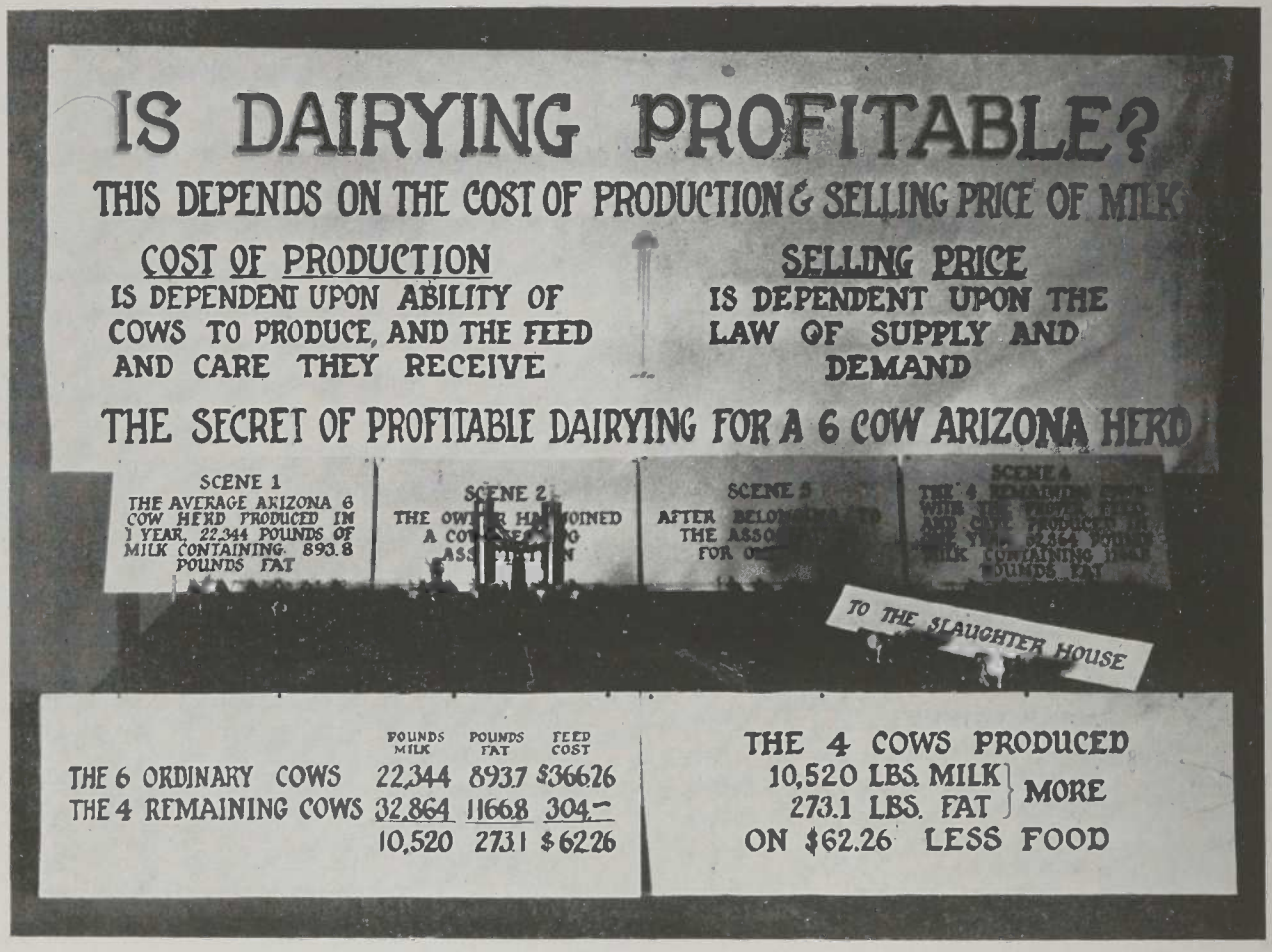
What is a cow testing association?—It seems that a number of the dairymen of the State have erroneous ideas as to the management and function of a cow testing association. Some think its function is to test cows for tuberculosis, others think it is managed by the Farm Bureau while still others have the idea it is connected with one or other of the different farm organizations of the State.

A cow testing association is an organization of dairymen, the purpose of which is to increase the production and profits of the association herds.

The members of the association elect annually a board of directors from their own number and this board is the governing body of the association. Each member has one vote in the election of a board of directors or other business transacted at meetings of the association. A cow testing association in Arizona is in no way controlled by any outside organization but has the good will and moral support of the different farmers' organizations and dairy plants of the State.

History—The first cow testing association was organized in Denmark in 1895. They were very successful in that country and the movement soon spread to other European countries where dairying is an important industry.

The first association in the United States was organized at Fremont, Michigan, in 1905. January 1, 1923, there were 732 associations in the United States. Two of this number were in Arizona and 176 in Wisconsin.



There is only one way in which the production of a cow can be accurately determined and that is to weigh and test the milk at regular intervals and keep records of production. The dairymen may do this themselves but regardless of their good intentions it is very seldom that a dairyman will test his cows monthly and keep records of production. A more satisfactory and generally less expensive method to get records of the dairy herd is through the medium of the cow testing association.

The average milk production per cow in Denmark, where the cow testing association originated, is over 60 percent more than that of the United States.

The tester and his work—The success of a cow testing association depends very largely on the one who weighs and tests the milk and keeps the records—commonly called The Tester. A successful tester must be

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an experienced dairyman and have technical training so that he is competent to make the Babcock test for milk fat and advise the dairymen on feeding and care of their cows. He is employed by the board of directors and works under their direction.

The tester spends one day in each month with each member of the association. He watches the cows milked evening and morning and weighs and tests the milk from each cow. The amount of milk and fat produced in twenty-four hours multiplied by the number of days in the month is taken as the cow's monthly production. Recent data indicates this is correct within two percent for milk and three percent for fat. The tester also makes note of the feed the cows are receiving and enters each cow's milk and fat production and feed cost in the herd book. He furnishes the members of the association with a monthrly record of each cow in the association showing production and difference in value of milk and cost of feed for the month. At the end end of the year the tester supplies each member with a record of each cow in his herd showing milk and fat production and difference in value of product and feed cost for the year. The tester and the members use this data to intelligently cull the herds and thereby increase the average production and profits of the association members.

Cost of cow testing association—The cost per cow will depend somewhat on the size of the herd and salary paid the tester. At the present time the two associations in the State are charging twenty cents per cow per month with a minimum of twenty cents in one herd or a minimum monthly herd cost of $4.00. A cow producing only 150 pounds of fat a year will lose her owner more than this amount each year.

How to become a member—Your county agent or the Agricultural Extension Service, University of Arizona will be glad to explain the workings of the association in detail and put you in touch with the officials of the association.

What members think of the cow testing associations—"The association eliminates guessing from dairying."

"To me cow testing has been of a very great value, and I would hate to attempt dairying without it. I seriously doubt if a dairyman can reap maximum returns from a herd of cows without it."

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THE BABY BEEF EXPERIMENT

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ner this important phase of calf feeding is cared for.

Cottonseed Meal for Calves

Lot V, another group of steers, is busy turning out results on a ration of hay, silage and barley. The grain-saving power of cottonseed meal and the advisability of withholding the meal until the latter part of the fedeing period, when it may be allowed in considerable quantity, are considerations being cared for by these animals.

The Value of Silage in the Ration

Lot VI has been added for the benefit of those feeders who are not in position to feed silage and for those interested in the dollar value of silage when used in a calf fattening ration. Allotted equal to lots I, IV and V the calves in this sixth group are racing toward the finish goal without silage in their feed. It is possible that the barley will need to be increased toward the latter part of the feeding period in order to keep them going, but they will tell the no-silage story in terms that all of us understand.

Individual Records

These calves are now in the feedlots at the Salt River Valley Experiment Farm, Mesa, each wearing an individual number and each furnishing individual records as well as contributing to group data. Can the calf with an initial weight of 300 pounds gain as rapidly and as eceonomically as his 500 pound mate? Will the fatter calf outgain his less fortunate companion? Allotment considerations--previous treatment, sex, weight, condition, breeding, and probable outcome or feeder grade—have made every lot as nearly equal at the start as it is possible to make them. In April these sixty Hereford calves, fat, sleek, and weighing nearly 700 pounds each, will be inspected by buyers from different packing houses who will submit separate sealed bids on each group. This valuable market information will then be further supplemented by slaughter data. Sixty carcasses hanging in the slaughter house side by side, with cuts of convenient size—tender, juicy, quality meat; this is as far as we can follow these calves. We leave them to soon! But what a wealth of valuable data for the prospective calf-feeder!

ANNUAL CONFERENCE OF AGRICULTURAL EXTENSION SERVICE---UNIVERSITY OF ARIZONA

DURING the third week of December the annual Conference of the Agricultural Extension Service was held in Tucson-From Monday morning, December 14th until the conference adjourned on the afternoon of December 17th, there was not a period that was not used in the presenting of information gleaned during the past year by the extension men and women. With its headquarters in Tucson, the extension service reaches all parts of the state and serves specifically the diversified agricultural interest of the state. Naturally in any great organization, occasional meeting must be held for the benefit of all concerned—hence the annual conference.

During the first part of the Conference the county agents reviewed the work done in their counties during the past year. Thus the things learned by each agent became common knowledge. The various field specialists gave their reports, giving detailed information on the most important projects that they had carried out.

A program for the coming year was presented by each county which had a definite value in that all workers know what is being done, thus preventing repetition. The county agents lined their work out in projects and set definite goals to gain during the coming year. Home Demonstration Agents will emphasize health and home management. Both of these lines of work are fundamental to satisfactory rural life.

A conference of this type brings out in a very striking manner the great diversity of Arizona's Agriculture. The area adapted to cotton is limited, and the successful growing of citrus fruits and dates is limited to an even more restricted area. Two crops only, alfalfa and the small grains, can be said to be common to all counties in the state.

An interesting feature of the conference was presented by County Agent Fillerup of Navajo County on the storing of ice for summer use. The winters are sufficiently cold in the northern part of the state to freeze ice of considerable thickness and advantage of this is being taken. Ice houses are being built to hold the ice for summer use. It is estimated that no less than twenty-five ice houses will be built this year in Navajo County.

One of the most important problems of the Extension Service in Arizona is the Economic use of irrigation water. This is an entirely new field, no previous work having been done along this line. B. J. Showers is the specialist in charge of this work. Facts are being secured from field practices and it has already been demonstrated that water properly used will go many times further than when used unintelligently.

Another important project especially vital to the stockmen of the state, is the work in the eradication of Tubercular cattle in Arizona. Federal and state veterinarians met at the conference to agree on the methods to use in ridding our state of this disease. It was decided that each county should have a definite program for the eradication of tuberculosis. The state and Federal Veterinarians will be responsible for all testing work, and will aid in educational problems. The time needed for this undertaking will vary from one to several years. Some counties have already started and will soon finish the work. Pima County will be among the first to eradicate tuberculosis from its dairy herds. The Extension service is responsible for the briging to the attenntion of the farmer the nature and importance of this work. County agents will arrange for meeting to be addressed by veterians and see that cattle are assembled in large enough herds that the State and Federal veterinarians may be used to the best advantage.

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"Under present conditions, to keep cows without losing money, a man should raise alfalfa, have a silo, and belong to a testing association. Without any one of these he is rather up against it."

"You know what each cow is doing and you can feed them accordingly and cull out the poorer ones."

A dairyman in another state was milking 77 cows. The third year in a cow testing association he was milking 53 cows and earned about $4350 more than he did the first year.

One member has been in the Maricopa County Cow Testing Association since its organization in 1921. Following is the average fat produced per cow for the four years:

1921-22	321.5
1922-23	344.8
1923-24	373.2
1924-25	400.0

At forty-five cents per pound fat this member has increased the annual income per cow in his herd $35.50 in four years. This would amount to $710.00 a year for a herd of twenty cows.

The kindly old party stopped and inquired, "What's your little brother crying for?"

Willie scratched his head. "I don't know," he confessed.

"And how old is the little chap?" continued the kindly old party.

Willie smiled. "I don't know exactly," was the reply, "but, thank goodness, he will soon be old enough to slap!"