

Oregon Agricultural College is the Friend of the Farmer

A Page of Bulletins and News Notes Concerning the Staff at Corvallis.

MOST of the items of cost that enter into the production of milk have greatly increased in cost during the last few years, but there has not been a corresponding increase in the price of milk and milk products. Since the success of the dairymen is dependent upon the relative cost of production and price of dairy products it is evident that he must lower the cost of production if he is to carry on his business with any profit. It is plain that he cannot fix or materially alter the price of dairy products. The cost of feed, labor, equipment and dairy operation is also largely beyond his power of extensive control. The solution of this embarrassing situation, which is becoming acute, is to keep better cows.

"The problem is not a difficult one and improvement of both type and producing ability can be easily effected," says Professor Graves, head of the college dairy department. "That there is great need of improvement in the producing power of the average dairy herd of our state is very evident. Two facts of vital importance to dairymen have been revealed in the work of experiment stations, cow testing associations. These are, a great variation in the producing ability of different individuals in the herd, and a low average yield per cow. These results have shown the farmers the need of awakening to a more careful study and investigation of the producing power of their cows. It has been shown in these investigations that the best cow sometimes yields two or three times as much as the poorest. And if a record of food eaten is also kept, it will be found that there is a great variation in the milk yield of cows receiving the same amount of feed. The cost of production is usually inversely proportional to the amount of production.

"Abundant opportunity for improvement exists here in the Northwest, if we but avail ourselves of it. If proper methods are used, improvement can be easily and quickly effected.

"The breeding of cattle is an integral part of the progressive dairyman's business. The herd must be replenished and the natural increase cared for if continuous productiveness is provided for. The usefulness of the average dairy cow does not cover a period of more than eight years. For various reasons animals are continually dropping out or being discarded. Not fewer than 30,000 cows are needed to replace those that will finish their profitable work in the herds of Oregon this year and furnish the necessary increase.

"These must be secured either by purchasing outside the state or by raising heifer calves. Some dairymen depend upon purchase and others raise calves enough each year to keep up the number in the herd.

"If these 30,000 cows were as much superior to their dams as they could be made by proper methods of breeding, this state would soon attract the attention of the whole world because of the high average production of its dairy cows. The aim of the breeder should not be merely to secure reproduction, but to secure animals that are superior to their ancestors.

"In bringing about this improvement it is not necessary to establish new types or breeds. The Jerseys, Holsteins, Guernseys, and Ayrshires, respond favorably to our conditions.

"The first step in improvement is to stop at once the crossing of breeds and the use of grade or scrub bulls. There is not much hope of improving herds by buying cattle, for not often do our neighbors wish to sell their best cattle. Further, the time, expense and labor involved in hunting stock are almost prohibitive to a busy farmer. Where the standard of production is maintained by purchasing cows to keep up the herd there is grave risk of introducing tuberculosis or other contagious diseases into the herd.

"Our easiest, quickest and most satisfactory method of improving our dairy herds is the use of a meritorious sire of one of the dairy breeds, the careful selection and raising of his daughters from the best cows, and systematic cooperative breeding.

"There is nothing that will pay the dairyman better than to study his herd carefully and take steps to start breeding operations with the definite object in view of increasing the value of his herd through weeding out the unprofitable cows and selecting carefully the animals to be mated. In selection, we have the most direct and powerful means of improvement at the disposal of the breeder.

FEEDING BABY CHICKS.

YOUNG chicks receive the first feed at the Oregon station when about 24 to 36 hours old. They are given bran, mixed crumbly with raw egg, or bread dipped in milk and squeezed dry, twice a day for the first week, and equal parts of cracked wheat and cracked corn on clean sand three times a day. After two or three days the grain mixture is fed in the litter. Clean water, grit, charcoal, and cracked bone, in separate dishes, are kept before them. They also have access to green food. When one week old the chicks are fed a moist mash of three parts bran, one part wheat middlings, one pound corn meal, and a pinch of salt—about what they will eat up in an hour—grain mixture two or three times a day, beef scraps in a hopper, and other supplies as before. When three weeks old, they have milk added to the ration.

GROWING CLOVER SEED.

THE raising of clover seed is not only much more profitable ordinarily than growing clover hay, but is very much better from the fertility standpoint." This is the answer of Professor Seudder, agronomist of the agricultural college, to a large number of farmers who should like to grow clover seed but "thought that it was awfully hard on the soil."

The inquiries arose over a statement in the Country Gentleman to the effect that clover hay removes about \$8.50 worth of soil fertility with each ton, and that clover seed removes but about 35 cents' worth. It has often been pointed out by the agronomy department that while the actual value of the nitrogen phosphorous and potassium in a ton of clover hay is about \$10.50, \$8 of this amount of nitrogen which is half taken from the air, but which is needed to maintain soil fertility. When the hay is sold, this value leaves the field. When fed on the ground, 80 per cent of it is returned to the soil.

If the clover seed is taken from a ton of clover, but 35 cents' worth of these plant foods are taken out. If the straw is then burned the value is mostly destroyed, but if the straw is returned to the field and disked in, the value is retained and humus is added to the soil.

"Therefore proceed with your seed growing," says Professor Seudder; "the more the better. As long as you do not destroy the straw, it is one of the best crops you can grow."

HOW AND WHEN TO SPRAY ORCHARDS.

THE results of many years of study and observation of the damage and control of disease and insect pests of Oregon are told in the latest bulletin issued by the crop pest department of the Oregon Agricultural college, "How and When to Spray Orchards." One very important and encouraging fact brought out in this study is that it is not necessary for the grower to learn a great many spray mixtures, but that he should learn well a few of the standard remedies and how to apply them most efficiently and economically.

"It is highly important that spraying be done at the proper time with the right spray," says the bulletin. "Each pest, whether fungus or insect, has its own particular life history and a definite time of attacking plants. This life history determines the treatment and should be familiar to all growers in the district where the pest damage occurs. Every farmer should be familiar with all the pests of his own district."

An experienced man says pit silos should have a plastering of cement not less than one inch thick.



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For Governor



Gus C. Moser

Republican Primaries May 15

He voted against the new tax law, and stands for reduction of taxes, payable semi-annually, without penalty.

Economy, efficiency—dignified law enforcement.

(Paid Advertisement.)

For Governor



WM. A. CARTER
Of Portland, Republican

Realizing that conditions have become such as to require drastic measures for the reduction of taxes and the consequent high cost of living, William A. Carter was the first gubernatorial candidate to announce this in his platform and to stand for the semi-annual payment of taxes. The curtailment of a number of useless boards and the consolidation of others, with a saving of at least \$500,000 annually to the taxpayers of the State is to be put up to the people at the November election in the shape of an initiative measure, prepared by Mr. Carter and which is now being circulated for signatures. Other prominent planks in the Carter platform are a stand for laws to prevent the Legislature from repealing laws made by the people; to prevent cold storage of food products until same shall have spoiled, for the purpose of maintaining high prices; law giving Governor power to veto single items in appropriations; rigid law enforcement and good roads. Laws for the protection and advancement of interests of working people of the State, and building up of industries, which he advocates, are of particular interest to all who are

interested in the upbuilding of the State, while his advocacy of more active participation of women in legislation, particularly in laws affecting schools, home and domestic relations, are in line with his slogan: "PROTECT THE HOME." Inasmuch as he is a strong advocate of good roads, his candidacy should appeal strongly to those in outlying districts.

Mr. Carter was born in Greenville, Tennessee, forty years ago, and at the age of 18 moved with his parents to Jackson County, Oregon. He worked as a farm hand, a section hand, where he received \$1.37 a day, and in the mines while studying law of nights. He was admitted to the bar to practice in 1898 and been successful in his profession since. That year he was captain of a company of volunteers from the Rogue River Valley to fight in the Philippines. Was City Recorder of Gold Hill, Oregon, four terms. In 1901 he was sent to the Legislature from Jackson County and led the fight in that body for the reduction of railway fares from four to three cents. He is married and has three children.

(Paid Advertisement)

All dried beans should be soaked several hours before cooking; they should then be boiled slowly.

Open canned fruit or vegetables and pour into a dish several hours before they are served.

Prunes are greatly improved if a little cider is added to the water in which they are cooked.

A pretty mull or dotted swiss curtain makes an excellent substitute for pillow shams.