

Farmer, Stockman and Dairyman

Bull Associations—

A plan of securing pure bred bulls that has proven very satisfactory in many localities is something like the following: Any number of farmers who are interested in breeding one particular type of cattle combine to form a bull association. They meet and enter into a free and general discussion of the entire subject and then decide upon the advisability of forming a permanent organization. This may embrace the citizens of one community or the citizens of several communities. As many as 35 or 40 cows should be included. If several communities are included, there should be as many bulls secured as there are communities, and then these bulls can be exchanged after two years and again in four years and thus any one neighborhood can get by several years without the expense of purchasing another bull. Some farmer centrally located should be selected to take care of the bull, and each farmer should pay his share of the purchase price and his share of the expense of keeping the bull.

A small bunch of farmers, four I think, on Deer Creek adopted a plan similar to this last fall and secured a Herford bull. From the size of his herd neither of the farmers was justified in going to the expense of securing an expensive animal, but under this plan each one of them has use of an excellent sire by an outlay of one-fourth the purchase price. It is of advantage to have the association incorporated as it facilitates the transaction of business, equitably distributes responsibility, and gives organization greater prestige in the community.

Winter Care of Poultry—

Every season of the year brings its problems for the poultrymen as well as to livestock men. If every thing is ready and the poultryman has a firm knowledge of his business, he can meet the conditions as they appear.

Everybody who has poultry is anxious about winter eggs. It matters not if the flock be large or small, the desire for eggs is the same.

If poultry is to be profitable, they must necessarily be producers during the season of the year when the demand is so heavy.

Many people have the idea that their birds are not bred right for winter layers (which can easily be true), but no flock will lay during the winter months unless they get proper care. Proper care does not necessarily mean plenty of feed and good houses, all of which is very important.

Good birds, suitably housed, with plenty of feed properly fed, is the secret. The first thing necessary before taking the birds into winter quarters, is a thorough cleaning and disinfection of the houses. Every nook and corner should be carefully gone over to insure the removal of the dirt that may collect during the hot, dusty summer months. A good coat of white wash (containing a liberal amount of some good coal tar preparation) will aid sanitation wonderfully.

Sanitation is just as necessary to the health of poultry as it is to any other animal, man or beast alike. An unhealthy flock cannot be productive.

Birds in winter quarters must be forced to exercise, if not, they will become sluggish and lazy. Feed the greater ration upon the floor in about a foot of good, clean straw. They will get exercise by scratching for their food. The straw should be changed often. The birds wear it out, and when it becomes cut up fine, there is danger of the birds becoming crop bound by swallowing the short bits of straw. The straw may not pass out of the crop and after a time will close up the passage. This can be avoided by removing the old straw and providing brush.

The birds must have plenty of green food, animal food, grit, shell, charcoal and fresh water. A mixture of good grain, properly fed, and a mash suitable for the breed that is being handled, will insure winter eggs.

—PREN MOORE.

Grade for the Common Farmer—

It does not sound unreasonable to claim that thoroughbred cows are the most economical producers of dairy products and that they will give larger and better returns for the amount of food consumed, but for the common farmer, who finds it part of his farm economy to grow and develop his own dairy cows, high grades will prove equally well adapted. Our natives or scrubs, as they are often called, are not profitable cows for the production of dairy products or for beef, hence it becomes necessary to infuse new and improved blood from the pure breeds if we wish to make their progeny profitable, and the question that confronts every farmer is, what kind of a sire shall I use?

As our native cattle have not been bred for any definite purpose they are neither beef nor dairy cattle—but are adapted to their environments and

have vigorous constitutions, it is plain to see that they are good material to build upon and improve for dairy uses.

When a dairyman has faced the actual practice of selling old cows from his herd for beef he will not feel encouraged over the outlook of combining beef and dairy qualities in the same herd. There seems to be a popular prejudice against eating beef from old worn-out dairy cows and I fail to see the advantages of trying to combine in one animal the two qualities. With us it has proved a losing game every time we tried to fatten an old dairy cow. Better sell her for a canner and strive to excel in the production of milk and butter.

If we use a pure bred sire of a decided dairy kind or strain, in a few years a good vigorous herd of cows will replace the unprofitable natives and a yearly output of from 200 to 300 pounds of butter fat from first-class grade cows will be realized.

What we need is more pure blood in our herds and the best and most economical way to get it is through the infusion of the blood of a pure bred sire that came from a line of high producing ancestry on both sides. A good bull will no more improve the quality of the dairy cattle in a neighborhood than anyone has an idea of. You may have doubts about it for the first two or three years, but not after you have seen the two and three-year-old heifers that result from his use.

I have a friend who became disgusted with selling his played-out dairy cows for \$15 to \$20 and sent to Ohio for a Shorthorn bull to cross on his herd. His heifers were excellent to look at but it required a close inspection to see their udders and they grew up into a lot of cows that were inferior for dairy purposes. This man admitted that his experiment cost him a good clean \$1,000, and at present he is using pure bred Guernsey bull.

His heifers from this sire show great promise, are doing good work in the dairy and have done more to convince me that Guernseys are capable of stamping their individuality upon the common dairy stock of the country than any one thing that I have ever seen.

Farmers and dairymen are making a serious mistake when they allow themselves to be led away from a strictly dairy breed by some beef breed on account of the latter being larger and more pleasing to the eye.

W. MILTON KELLY.

Selecting the Dairy Cow—

The foundation of the dairy industry rests upon the dairy cow. The true value of a dairy cow is measured by her capacity to consume feed and roughage of the farm and to convert it into milk—to produce. The capabilities of a cow are not always easy to determine from external appearances, nor are they fully reliable, yet there are a few points which are very reliable indicators.

The first essential to production is capacity. In order to produce large quantities of milk, the cow must have great capacity to store, digest and assimilate large quantities of food. By nature, ruminants were intended to consume large quantities of roughage, consequently the dairy cow needs to have a large stomach in which to store food, large intestinal surfaces to secrete digestive juices, to absorb and to assimilate the nutrients contained in the food. The points indicating capacity are great length, depth and width of abdomen. The cow with a large barrel is usually preferred to one with long legs and a slim body.

It is quite generally conceded that a maximum flesh production and an economical milk production cannot be combined well in the same animal. With a cow heavily fleshed over the neck, shoulders, back and loins, a large amount of food material must of necessity go to nourish these parts. It follows that to obtain the largest and most economical returns in milk production, one must look for the dairy type or thin neck, medium shoulders, thinly fleshed; back lean, straight and open-jointed; loin lean and broad.

From the udder development, a good dairy cow usually exhibits reasonably strong indications of her ability to convert raw food material into milk. Large production usually is coupled with a reasonably large udder. In the udder is where the milk secretion occurs, while the indications are length and breadth of udder, attached high and full behind, level beneath with teats of reasonable size and evenly placed; extending well forward, giving it capacity; free from fleshiness and flexible, indicating large internal glandular secreting surface capable of much expansion; and well supplied with nerves, lymphatics and blood vessels.

Coupled with a large, well-formed udder are desired large tortuous milk veins. The quantity of milk secreted by the glands in the udder is depend-

ent upon the amount of blood flowing through that organ. The milk veins take the blood supply after it has passed through the udder and carry it back to the heart. It is well that the milk veins be long, branching and tortuous, indicating that the blood flows through them in large quantities and slowly, thus giving time to deposit its load of milk constituents in the udder.

In addition to the foregoing is desired a strong constitution and abundant energy to keep the machinery of the body in motion. The constitution is indicated in a broad muzzle with prominent nostrils and broad, deep chest to supply the body with ample capacity for breathing. The head is the seat of energy. A large brain box, as indicated by a broad forehead and prominent eye, usually goes with a strong connection of head and neck, together with a large open spine to furnish ample room for a strong cord to connect with the seat of energy in the head and to transmit an abundance of nervous force to the heart, lungs, digestive tract, reproduction organs, udder and other centers of the body.

Learn to Cull Poor Layers—

All poor layers should be culled from the poultry flock in the early fall.

In a year when high prices of feed prevail it is essential that all non-producers be removed from the flock. The only accurate method to locate the layers is the use of the trap nest. This, however, requires too much time and expense for the average poultryman.

A satisfactory way is to feed the hens liberally at night, and then pass through the house after the birds have gone to roost, feeling the crop of each bird. Those that are laying will have well filled crops, while those not laying or in poor condition will eat much less feed.

All hens found sitting on the roost in the daytime are boarders and should be disposed of immediately. In yellow-legged varieties the yellow color will practically disappear while the hens are laying. In some instances, in fact, the legs will even be white.

Another strong indication of heavy egg production is late molting. Contrary to the prevailing opinion, the hen that molts early and is a fine looking bird early in the fall, is not the one which has been filling the egg basket. The late molter sheds her coat quickly, often being almost entirely naked. Such hens should be carefully fed and kept for breeders the following season.

All immature pullets and hens that do not appear to be in good health should be disposed of as soon as possible. Only those birds showing unmistakable signs of producing eggs throughout the winter and spring should be kept, if profitable returns are to be expected from the feed given to poultry this season.

Exercise for Breeding Stock—

Much has been learned about feeding live stock from the chemists' investigations, and it is impossible to find a successful feeder today who has not a comprehensive grasp on the comparative value of the different feeds. The average man may not know the exact character of "protein" and he may not have a clear idea as to the chemical composition of starch or fat, but he is aware that in feeding operations the former adds flesh-forming elements, while the latter supply material for heat and energy. The one, as it were, offsets the two and the result is a balanced ration.

However, there is considerable to learn yet, because sometimes very irrational methods of feeding will bring about satisfactory results. You may take a bunch of cows in calf, for example, and allow them to run in the corn stalk fields every day, having access to shelter in stormy weather, and the probabilities are that they will all bring forth robust calves. These cows, handled in this way, have consumed anything but a balanced ration during the winter, because their food has consisted largely of corn that has been left in the field and the dry fodder leaves. How is it that on such a ration they are so well fitted for bringing forth their young?

This question must to a large extent remain unanswered, because, applying the chemist's rule, we could not possibly expect good results. Success in this instance must be traceable to the fact that in exercising, enough heat or energy is expended to offset any injurious effect that may result from feeding too much starch and fat. We have in mind scores of instances where pure-bred cows are turned into stalk fields in the fall in rather thin condition and before spring these cows are "mountains" of fat, and yet every one of them will be followed the next summer by a sturdy calf. As said before, the only explanation that can be offered is that the exercise must have the effect of bal-

ancing the ration as it were. To some extent, the same doctrine applies in the case of brood sows, and in our opinion the exercise is doubly important in this instance. Sometimes men are not equipped to give any special attention to the brood sows, and find it more convenient to feed a balanced ration. If in such instances the sows could be turned away from their pens and their sleeping quarters the entire day and if, in addition to this, they could be fed their corn at the far side of a big pasture, it is surprising what good results will sometimes follow this seemingly irrational method of feeding. It would be absurd to say that a sow will never farrow a strong litter and bring them through in good shape if she is fed corn alone during the gestation period, because instance upon instance could be cited which would prove this to be absolutely true. But it must be understood that when corn alone is fed it is of the utmost importance that the exercise must be given, and that this shall not be optional with the sows, but compulsory. If they have to take the exercise in order to get their feed, then they will take it, but not otherwise if they are fed heavily on corn.

The same doctrine applies to all kind of breeding animal, and includes especially the mare and the ewe. No system of feeding, regardless of how expensive the ration may be, will offset the beneficial effect of plenty of exercise, while, as said before, lots of exercise may offset the injurious effect of a ration that is far from balanced.

Disinfecting Seed Grain—
The difficulty of drying grain after treatment, by dipping or sprinkling with formaldehyde and the resulting failure of a portion of the seed, so treated, to germinate, has resulted in the development of a method of treatment called the "spraying method," which has been found to be satisfactory in various sections of the country.

The only apparatus necessary is a small quart sprayer, such as is used in spraying small gardens. One stroke of the pump will give enough mist if properly distributed for each shovelful of grain. As the seed is being shoveled from one pile to another, each shovelful is sprayed with a solution of one part of commercial formaldehyde "40 per cent" and one part of water. The solution is used at the rate of one quart to 50 bushels of seed.

After all the grain is treated and piled in a heap it is covered with sacks, burlap or canvas, to confine the fumes. At the end of five hours the covers may be removed and the seed is ready for planting.

Milk quickly, quietly, cleanly and thoroughly. Cows do not like unnecessary noise or delay. Commence milking at exactly the same hour every morning and evening and milk the cows in the same order.

Lice on Hogs—

A pig weighing 150 pounds will have approximately twelve pints of blood, each pint containing 7,680 drops, or a little over 92,000 drops of blood. If a louse abstracts a drop a day, and the

pig is boarding several thousand lice, it is easy to see where the profit goes when "hogs don't pay."

It is worse than useless to "dope" the pig with "lice killer" without disinfecting pens, bedding and in the spring, the wallow.

First burn all the loose, dry straw, clean out manure, spray the floors, walls, beams, troughs and every crevice with a ten per cent solution of formalin or a half gallon of formalin to five gallons of water. Creolin may be added to wallow in warm weather, say, half a pint to a large wallow.

Then dust on each pig powdered staphisagria. This will cause the average louse to homestead elsewhere.

—E. T. BAKER.

Veterinarian Idaho Ex. Station.

SCHOOL DISTRICT BUDGET

To the Clerk of District No. 19, Lane County, Oregon:

Following is a statement of the estimated amount of money needed by the district during the fiscal year beginning on June 17, 1918, and ending on June 30, 1919. This budget is made in compliance with section 217 of the Oregon School Laws of 1917, and includes the estimated amount to be received from the County School Fund, Special District Tax and all other moneys of the district.

ESTIMATED EXPENDITURES.

| | |
|--|--------------------|
| Teachers' salaries | \$13,672.50 |
| Furniture and supplies | 50.00 |
| Apparatus and supplies | 200.00 |
| Library books and text books | 75.00 |
| Flags | 20.00 |
| Repairs | 200.00 |
| Improving grounds | 75.00 |
| Playground equipment | 20.00 |
| Janitor's wages | 1,300.00 |
| Janitor's supplies | 300.00 |
| Fuel | 400.00 |
| Light | 50.00 |
| Water | 150.00 |
| Clerk salary | 175.00 |
| Postage and stationery | 100.00 |
| Telephones | 100.00 |
| Insurance | 300.00 |
| Miscellaneous | 300.00 |
| Bonds and interest thereon, issued under Sections 117, 144 to 148, and 422 of the School Laws of Oregon for 1917 | 1,700.00 |
| Total | \$18,587.50 |

Total estimated amount of money to be expended for all purposes during the year

ESTIMATED RECEIPTS.

| | |
|---|-------------|
| From County School Fund for the coming year | \$ 5,747.00 |
| From State-School Fund | 1,081.93 |
| Cash now in the hands of the District Clerk | None |
| Cash now in the hands of the County Treasurer belonging to the district | None |
| Estimated amount to be received from all other sources during the year | 100.00 |

Total estimated receipts, not including the money to be received from the tax which it is proposed to vote

\$ 6,928.92

RECAPITULATION.

| | |
|--|-------------|
| Total estimated expenses for the year | \$18,587.50 |
| Total estimated receipts not including the tax to be voted | 6,928.92 |

Balance amount to be raised by district tax \$11,658.58

(Signed), R. A. WASHBURN, WELBY STEVENS, J. E. RICHMOND, Board of Directors of District No. 19, Dated November 18, 1918.

CITATION.

In the County Court of the State of Oregon for the County of Lane. In the matter of the estate of Sarah C. Brothers, deceased.

To Wm. A. Tait, Charles C. Bishop, Robert H. Bishop, Alice Rogers and Harvey Rogers, her husband, Greeting:

In the name of the State of Oregon you are hereby cited and required to appear in the County Court of the State of Oregon, for the County of Lane, at the court room thereof, at Eugene, in the County of Lane, on Thursday, the 2nd day of January, 1919, at 10 o'clock in the forenoon of that day, then and there to show cause if any you have, why an order of sale should not be made for the sale of the real property belonging to said estate in accordance with the petition of the Administrator of said estate on file herein, said real estate being described as the N. E. 1/4 of the N. W. 1/4 and the west 1/4 of the N. W. 1/4 of the N. E. 1/4 of Sec. 14, Tp. 16 S., R. 3 west of the W. M., in Lane county, Oregon, excepting 25 acres thereof heretofore sold to Bertha M. Paddock, and one acre conveyed for school purposes, and excepting such rights and privileges as the S. P. Co. may have by virtue of deeds recorded at pages 495 and 587 of Vol. 73 of the Deed Records of Lane county, Oregon, and excepting same rights of Fischer Bros. Witness, the Hon. H. L. Bown, Judge of the County Court of the State of Oregon, for the County of Lane and the Seal of said Court hereunto affixed, this 18th day of November, 1918.

(Seal), Attest: STACY M. RUSSELL, Clerk.

SUMMONS.

In the Circuit Court of the State of Oregon for the County of Lane. Nora Payne, plaintiff, vs. Matt Payne, defendant.

To Matt Payne, the above named defendant:

In the name of the State of Oregon you are hereby required to appear and answer the complaint filed against you in the above entitled court and cause on or before the 28th day of November, 1918, said date being the date and time specified by the court in the order for publication as the time for you to appear and answer, and if you fail so to appear and answer, for want thereof the plaintiff will apply to the court for the relief demanded in said complaint on file herein, and the whole thereof. The relief demanded is: Judgment and decree that the bonds of matrimony now existing between the plaintiff and defendant be forever dissolved and held for naught and that the plaintiff be awarded the care and custody of the two minor children, Claude Payne and Nelvin Payne, and for such other relief as to the court may seem meet and equitable.

This summons is published by the order of the Honorable G. F. Skipworth, Judge of the Circuit Court of the State of Oregon for the County of Lane, dated October 14, 1918.

FRANK A. DePUE, Residence Springfield, Oregon. Oct. 17, 24, 31; Nov. 7, 14, 21, 28.

NOTICE OF ANNUAL MEETING TO FIX TAX LEVY.

Notice is hereby given that there will be a special meeting of the taxpayers of School District No. 19 on Friday evening, November 29, 1918, at 7:30 p. m., for the purpose of fixing the annual levy of a Special Tax, and to consider such other matters as may properly come before the meeting.

Said meeting shall be held at the High School Building on Mill street. (Signed) B. A. WASHBURN, Chairman of Board of Directors. JOHN E. EDWARDS, Clerk.

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