

DAIRY

BIG ADVANTAGES OF FALL CALVES

There are a number of advantages in having dairy calves dropped in the fall. Cows which freshen in the fall usually produce more milk than cows which freshen at other seasons of the year. Heifers are usually bred so that they will come in milk at two years of age. If they are fall calves they will mature at the proper season. Calves which are to be raised on skim milk can be kept growing nicely during the winter and turned out on pasture without checking their growth. The disadvantages of feeding and care in winter are more than offset by the annoyance from flies and hot weather which are experienced by the spring calves. In addition there is usually more time available for giving the calves proper attention in the winter.

Clean pails for feeding and clean barns for housing are two important essentials in raising the calves. The calves will need to have a stall or lot where they can get plenty of sunshine. If the calves are confined to a dirty, dark stall they are apt to become unthrifty.

Calves should have their mothers' milk when they are started on feed. Whole milk should be continued for the first month and gradually shifted to skim milk. The calves should be given grain as soon as they will eat it. If a little cracked corn is placed in the bottom of the milk pails the calves will soon acquire a taste for it. The amount of milk and grain should always be limited. Better results are obtained if the calves are kept hungry.

An abundance of clean water should be accessible at all times or available at frequent intervals. Good hay should be provided. Many people favor mixed hay for calves as it is less apt to cause scours than alfalfa hay. However, good results can be had in feeding alfalfa hay if it is fed in limited quantities so that the calves will not gorge themselves. If any scours appear, the hay should be changed and special attention paid to cleanliness of both the stalls and milk pails. Sanitation, feeding and housing are the important details in raising fall calves successfully.

Dairymen Gain Much by Better Feeding Methods

That ground corn and ground oats make a dairy cow ration that is far superior to broken ear corn has been strikingly demonstrated in the case of one Knox county (Ill.) dairy herd, says C. S. Rhode, dairy extension specialist of the college of agriculture, University of Illinois, who has charge of the county dairy herd improvement associations in the state. The owner of this Knox county herd increased his profits \$27.74 during one month by changing from a feed of broken ear corn to one of ground corn and ground oats, Fred Shipley, tester in the county herd improvement association, reported. With the change in the ration came an increase in the average production of each cow for the month of 100 pounds of milk and 6.7 pounds of butterfat.

The ration was improved both by grinding the corn and by adding the ground oats, Rhode explained. The benefits of grinding in this case are in line with the results of experimental work and the experiences of practical dairymen, according to Rhode. Dairy cows are hard-working animals and they will give better results if such feeds as corn, oats and barley are given to them in the ground form, he added.

Twin Bulls Declared to Be Potent as Breeders

Will twin calves breed? This subject is often misunderstood. Twin bulls are as sure breeders as bulls of single birth and there is no reason to suspect failure to breed when a bull is twinned with another bull, says W. W. Swett of the Missouri College of Agriculture.

The same thing can be said of heifers that are twinned together. They are as sure to be breeders as any other heifers.

When a heifer and a bull are born together, the heifer is known as a free-martin. The bull, twinned with a heifer is as certain to be a breeder as a bull of single birth, but the free-martin heifer is almost sure to be sterile.

Only a very few free-martins have been known to breed, and the chances are very small that they will ever reproduce. As a rule it is not advisable to raise free-martin heifers as they usually result in failures and are worth no more than their beef value.

Effect of Big Storm

Dairymen who have kept milk records for a series of years will know the effect of a big storm on the producing herd. Invariably there is a severe shrink resulting from a cold, stormy winter period. To prevent this shrink requires some additional work on the part of the cow keeper. A herdsman who is able to prevent a shrink during a blizzard understands his business and deserves commendation, for he has proven that he is efficient in his work.

FARM POULTRY

SANITATION PAYS CHICKEN RAISERS

Illinois farmers, who took big strides toward more profitable pork production by adopting swine sanitation, are now finding that sanitation pays just as well around the chicken lot as it does with pigs. To further the idea, poultry specialists of the college of agriculture, University of Illinois mapped out a workable system of poultry sanitation and already many chicken raisers of the state are profiting as a result of it.

There's the case of B. A. Barker, a Grundy county farmer, for instance, who took up the poultry sanitation idea and thereby put a stop to the heavy losses which he had been taking as a result of tapeworms and other poultry parasites and diseases. In connection with the sanitation system, Barker yarded his old hens for the first time this past year and as a result the egg production of the flock was more uniform throughout the summer than it had been in previous years, due to the fact that the hens were uniformly fed. Under this plan they always had access to mash but were not allowed to overeat on grain. Barker has co-operated with the agricultural college in its poultry flock record project for three years.

In putting the poultry sanitation plan into practice on his farm, Barker had his flock tested for tuberculosis. It also was pronounced free of bacillary white diarrhea, one of the worst of the many chick diseases. The old yard where most of the chicks had been raised before was turned into a garden and the chicks this past year raised on fresh ground which was sown to oats and rape. During the summer the rape provided shade as well as green feed. A movable brooder house was used.

C. H. Wilke, a McLean county farmer, is another Illinois poultryman who has profited as a result of following a definite system of poultry sanitation.

Wilke, who is co-operating with the extension service of the agricultural college in keeping records on his chickens, took off a hatch of 437 chicks in March and placed them on clean ground where no chicks had ever been raised before. The ground happened to be in a corn field. In line with the sanitation system which he was practicing, Wilke used movable brooder houses. No signs of disease showed up in these chicks throughout the entire season and 190 pullets were taken from the bunch and placed in winter quarters. They were plump and ready to lay.

Wilke's experiences with a batch of April chickens which were raised the old way are a striking contrast to the results which he obtained under the sanitation plan. There were 1,332 chicks in the hatch that came off in April. They were raised in old chicken yards where hens had run before and where chicks had been raised in previous years. The result was that one disease alone, coccidiosis, wiped out 25 per cent of the chicks. Roup followed as a result of the weakened condition of the stock.

Feeding Soaked Bread Is Dangerous Practice

There is danger in feeding soaked bread to poultry, according to a writer in an exchange. Soaked bread, he says, is one of the worst things one can feed poultry, either young or old, as usually fed, but there is a way of feeding stale bread that transforms it into one of the best and cheapest poultry foods.

To do this cut the bread into slices and dry it over a stove or in the oven, until it is dry enough to crack; put the bread in a pail, or stout box, and chop it up with a spade.

When ready to feed, put a quantity of this in a pail, cover with hot water and pour water off in about one minute, then mix in enough mash so that it will crumble. For summer or winter feeding this cannot be beaten as an egg or flesh producer. The finer particles of bread left in the bottom of the box when chopping up the bread make an excellent food for small chicks and may be fed dry.

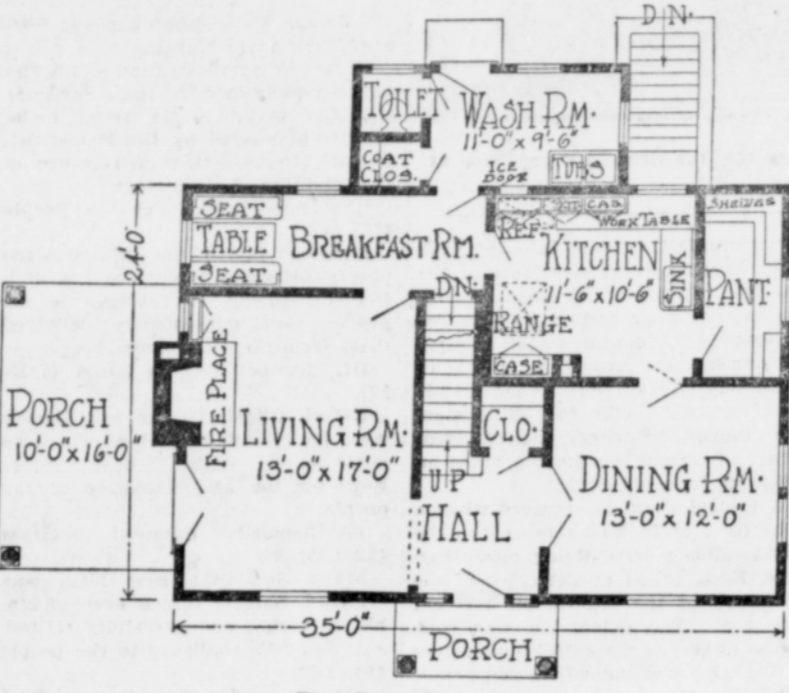
High Egg Production

In cold, severe mid-winter weather the winter-egg man gives attention to keeping his poultry house properly ventilated, as he knows from past experience that cold temperature and moist atmosphere do not go well with winter egg production. Too frequently, as cold weather comes, the poultryman begins to close the windows at night and pull down the curtains, which all goes to make matters worse, and causes marked decrease in egg flow.

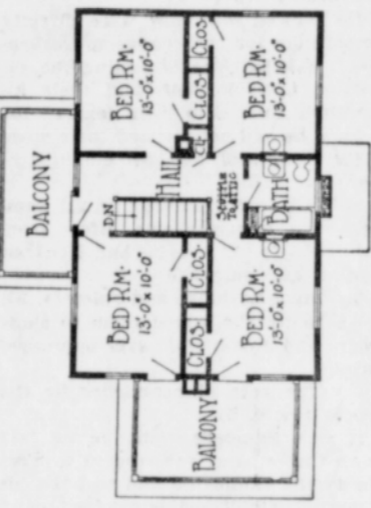
Mating the Flocks

When mating the flocks, allow \$ to 10 hens of the heavy breeds, such as Brahmas or Langshans, 10 to 12 females of American breeds, such as Plymouth Rocks and Wyandottes, and 12 to 15 hens of the light breeds, as Leghorns and Anconas, to each male. Cockerels will care for more hens than cocks and fewer males are necessary if the flock enjoys free range. Eggs may be saved for hatching and will generally be found fertile two days after the males are introduced.

Attractive and Commodious House Designed to Fit the Narrow Lot



First Floor Plan.



Second Floor Plan.

By W. A. RADFORD

Mr. William A. Radford will answer questions and give ADVICE FREE OF COST on all problems pertaining to the subject of building, for the readers of this paper. On account of his wide experience as editor, author and manufacturer, he is, without doubt, the highest authority on the subject. Address all inquiries to William A. Radford, No. 1827 Prairie Avenue, Chicago, Ill., and only inclose two-cent stamp for reply.

There is nothing more attractive than the colonial type of architecture for the home. The even balance of the exterior and the clapboard siding and shuttered windows may be rather severe, but they give the idea of roominess and comfort inside.

Here is pictured an unusually good design of this type of home. The se-

vere lines of the true colonial have been broken by the addition of an open porch with a balcony above at one end of the house. The graceful curve of the porch roof which is supported by colonial pillars and the fan-shaped window above the door mark this home as a colonial.

The exterior balance is retained in the interior. The entrance door leads into a central hall, at one side of which is the living room and at the other is the dining room. Thus both are front rooms and corner rooms, which means plenty of light and ventilation. Besides the kitchen there is a large breakfast room adjoining it at the back with a washroom at the rear. The advantages of this arrangement are that there are many times when meals may be served in the breakfast room without the necessity of going to the front of the house.

Upstairs, there are four bedrooms, all corner rooms, and the bathroom. These rooms open off a central hall, with the bathroom at the front end of it. Plenty of closet space is allowed for each room.

The dimensions of the house are 35 by 24 feet, which is not a large house. But the rectangular shape of the house permits the use of every inch of room in it. The living room is 13 by 17 feet, which is a good size, and at one end is a large open fireplace. Double doors open from this room to the porch. The dining room is 13 by 12 feet. Each one of the bedrooms is 10 by 13 feet.

The house is of frame construction set on a concrete foundation. This gives a basement the same size as the house for the heating plant and storage.

What You May Want to Know About Building

No woodwork should be installed in a house while the plaster is drying out, no matter how long a time this takes. Woodwork will be ruined if it is put on damp plaster. A delay of two or three weeks or even twice as long is of little consequence in comparison to the benefits obtained by waiting.

Common brick are usually employed for interior walls and for the backing of walls faced with face brick. Face brick have qualities of color and texture such as to make them especially suitable for wall facings. Common brick laid in pattern and by methods designed to bring out the mortar joint are extensively used for wall facings with fine effect.

Some stairs are hard to climb because: The proper ratio of rise to the tread is not observed. The rule is, the higher the rise the narrower the tread. In residences the following rule is commonly observed, twice the height of the riser plus the width of tread shall equal not less than 24 inches and not more than 25 inches.

Attractive Garage

For a pleasing, symmetrical appearance, the garage should correspond with the home in the matter of construction, as nothing is more distasteful to the eye than to see the beautiful effect of a well-constructed garage spoiled by a flimsy, unsightly structure of cheaper construction.

Brightness in Home

Every housewife wants a bright and cheerful home. She also wants one which will be easy to keep clean—one that will retain its fresh, new appearance for the longest possible time.

Big Variety of Wall Paper for Builders

There is no way to bring originality into your scheme of home decoration more easily than by using a delightful wall paper.

There are myriads of good wall-paper designs, lovely in color and charming in design, that are both beautiful and original. Their use immediately sets your room apart from the rest. For the large-space walls covered with a well-chosen paper dominate the scheme and strike a note of unusual interest that is not duplicated by a plain wall. There are so many wall-paper patterns that there is no reason why any kind of effect cannot be achieved by their use.

Wall paper is made to simulate many other materials, marble, chintz, linen, velvet, ribbon, tile, wood and others, and the art of printing it has reached such a state of proficiency that sometimes it is difficult after the paper is hung to tell the copy from the original.

Asbestos Shingles

Asbestos shingles are easily laid by any roofer, slater or carpenter and can be fastened tightly to prevent "wind-lifting." They may be applied to roof decks of ordinary design; hence involve no expense for alterations in the framing.

Concerning Walls

Of the many types of walls, each has advantages as to cost, durability, decoration, insulation, application, etc. Which will give you the best average for the job you have in mind?

Around Orchard

PROPER PRUNING HELPS VINEYARD

Owners of commercial or home vineyards would do well to adopt the long cane pruning system, demonstrations conducted last year by W. R. Martin, Jr., extension horticulturist of the Kansas State Agricultural college, showed.

Ninety per cent of the vineyards in Kansas are pruned on a short cane system at present. Mr. Martin estimates. His demonstrations, duplicated five times each in Doniphan, Shawnee, and Wyandotte counties, have convinced him that the yield will be doubled at least on the long cane system as compared with the short cane.

Four pruning methods were employed in the demonstrations—the four-cane Kniffen system, four canes, 10 buds long on each vine; the two-cane Kniffen, two canes, 20 buds long; the short arm fan, eight canes, five buds long; and the spur, 13½ canes, three buds long.

Average yields, in pounds per acre, from the four pruning systems in the 15 demonstrations made were as follows:

Four-cane Kniffen, 3,570; two-cane Kniffen, 3,905; short arm fan, 2,293; spur, 1,745.

The reason for the increase, Mr. Martin explained, is that the first two or three buds on a cane either are sterile or produce very small bunches of grapes. The most fruitful buds are found on the sixth to ninth nodes. Buds from the ninth on diminish in fruitfulness, but are more productive than those under the fifth. Therefore on short cane pruning systems, the most productive buds are cut off.

In conducting pruning operations, which should be done from December 1 to March 1, Mr. Martin pointed out further, secondary growth from nodes on the fruiting wood should be entirely cut away. In a Doniphan county demonstration canes pruned to leave the secondary growth yielded 3,019 pounds to the acre, while similar canes without spurs yielded 4,386 pound to the acre.

Grapes and Bush Fruits

Need Winter Protection

Grape vines and berry bushes do not ordinarily need winter protection in the commercial fruit areas, but in the other sections where winter temperatures commonly fall to 25 or 30 degrees below zero, they should be sheltered, according to Prof. Joseph Oskamp at the New York State College of Agriculture at Ithaca, N. Y.

This is often provided by "laying down" the canes before the ground freezes, and covering them with earth. With grapes, this is easily done if they have been trained to the fan system. Berry canes also may be laid on the ground and covered with straw and earth. Loosening the plants in the ground with a spade will often aid in doing this.

The different kinds of bush fruits as well as the different varieties of each kind vary widely in their hardiness. Red raspberries are the hardiest of the brambles; black raspberries are intermediate; while blackberries are the most tender. Currants and gooseberries are hardy and need no winter protection.

The grapes best suited to cold locations are, in general, those classed as early or very early which mature in a relatively short season.

Protect Against Winter

Damage From All Rodents

That young orchard which is coming along so nicely should be protected against winter damage from rabbits and mice.

The best device of this sort is a tube of old window screening or other finely meshed wire, placed about the trunk of each tree. It should reach two feet above the ground.

Old sacks or corn stalks are sometimes tied around the trunks to keep off rabbits. While this device may serve, it actually encourages mice damage, since these pests nest in any convenient trash.

Better clean and keep away all such rubbish, and be sure of safety by using the screening at only a little more cost.

Horticultural Hints

Strawberry fields must be covered with a straw mulch to a depth of four to five inches.

Keep a weather eye on the bugs and blights. Keep the sprayer in working order and shoot on sight.

It is much better to take out the old canes and keep the raspberries and blackberries clean.

A recent survey of New Hampshire revealed that more than half of the apple trees in that state are of the Baldwin variety.

Keeping a good set of records is largely a matter of habit. There is no other way of knowing and a record eliminates guessing.

The cherry trees, which are a famous feature of the national capital, were propagated from 15,000 stocks raised with particular care in a Japanese nursery.



PERFECTLY HONEST

A taxicab driver applied for a job. "Are you honest?" they asked him. "Oh, yes, quite." "Perfectly honest?" "Perfectly." "Suppose you found a pocketbook containing negotiable securities worth \$100,000 in your taxicab, what would you do?" "Do?" said the taxicab driver. "I'd do nothing. I'd live on my income."

KISSING ALOUD



He—So you think kissing shouldn't be allowed. She—Aloud? Well, not too loud.

Good Policy

Step and let the train go by. It hardly takes a minute. Your car starts off again intact. And, better still—you're in it.

Asking for Time

Mr. Bingo—I went into an antique furniture dealer's today to get that Chippendale chair you admired so much and he had just sold it. Mrs. Bingo—How unfortunate. Mr. Bingo—Yes. He said it would be at least a week before he could turn out another like it.

Poor Service

A visiting Briton ordered some fresh oysters in July. "Sorry, sir," said the waiter, "but we don't serve oysters at present." "Why not?" "This is not the season for them." "Eh! But, look here, isn't it possible to bribe the game warden?"

Sometimes the Case

"The old man has a good heart." "But he has such a grim face." "Well, it's quite a job for him to keep his false teeth in."

DOES FATHER BETTER



Friend—Do you think college does your son good? Dad—Oh, yes; but it does his father better.

So There!

I hope the crook who robbed a car will be, before he travels far, booked up for parking or 'time.

Very Soon

Sister—Oh, hum! Dad's on the war-path again. Mother (in significant tone)—Never mind. He'll soon come to a detour.

Field and Stream

"I have just been reading in the paper," observed the outdoor man, "about the wonderful catches of salmon in the Northwest." "Yeh," said the city sportsman, "I suppose some big league club will sign him up."

Easy Solution

"How can we get our girls to church?" "Why not our boys?" "The boys will follow the girls."

Request

"Was that last number by request?" "It was," answered the radio director. "Whose request?" "That of the feller who wanted to break in and recite."

A Gentle Hint

Reggie—You say you detest Lewis? Did he lend you the \$5 you asked him for? Clarence—Yes, but he lent me his memory course along with it.