

DAIRY FACTS

DORMANT PERIOD IS CRITICAL FOR COWS

Of course it is desirable to make certain modifications in rations for dairy cows that are to be fed during lactation as well as during the dry period. A milking ration must necessarily carry more protein than a maintenance ration. In too many instances dairymen feel that since the cow is not producing milk, she can survive on coarse roughages that are not supplemented with the usual grain allowance. This is a common error and a serious one.

If I were to judge the critical period, as far as nutrition is concerned, as it occurs in a dairy cow's cycle, I should say that the care and attention to the feed that is supplied during her dormant period is even more important than the selection of that given her while she is in milk, says a writer in the Rural New Yorker. If the cow is in good condition, then a ration consisting of 30 pounds cornmeal, 30 pounds ground oats, 30 pounds bran, 10 pounds linseed meal, makes an excellent winter dry ration. During the summer months, the linseed meal might properly be replaced with gluten feed or gluten meal. You understand, of course, that you feed about twice as much gluten feed as you do gluten meal in order to bring about an equal amount of protein. The 3 1/2 pounds of grain that you are feeding twice daily is quite sufficient during her lactation period, provided this will carry from 20 to 25 per cent of protein.

A ration consisting of equal parts of bran, cornmeal, gluten feed, and oilmeal would be rather concentrated, although it would carry about 20 per cent of protein. The addition of some ground oats to this combination would provide bulk and bring it more nearly into balance, especially for summer feeding. Neither millet hay nor the mixed hay you describe is suitable for milk production and it might be to your advantage to replace this roughage with alfalfa or clover hay, or at least mixed hay carrying some clover.

Let her have all of the corn fodder that she will clean up with relish. In fact, under the individual feeding system it is almost immaterial how and when the roughage is supplied. In the absence of some succulent feed such as cow peas, turnips, or small potatoes, or similar home-grown garden products, I should feed some moistened beet pulp. The candy ball serves as a vehicle in this instance, wherein four or five pounds of dry beet pulp is moistened for 12 hours before feeding and given the animal in two equal quantities, morning and night. This succulent feed is a carbohydrate carrier, is very palatable, and when fed in conjunction with grain ration mentioned above, when the cow is in milk, results in an increased daily production.

Alfalfa and Silage for Dairy Cows Without Grain

Some experiment station has been conducting a long-time experiment in feeding dairy cows on alfalfa hay and corn silage without grain feed. The test has been running now some ten years and the records show an average production per cow of something over 200 pounds of butterfat a year. That is good.

Alfalfa hay and corn silage make up a perfectly balanced ration and provide ample substance for cows of average production. Cows of high production, of course, require grain, but it might be said that the production of average cows kept for dairying in Minnesota could be increased a third if they were fed all the alfalfa hay and corn silage they required without grain. Too many farms are without an acre of alfalfa and without a silo.

A ton of good alfalfa hay is worth pretty close to a ton of bran for milk production. From two to three tons per acre is a reasonable yield. It can be seeded as late as June. Make a start this season.

Dairy Facts

Silage is a summer feed the year round.

Good cows are kept; poor cows maintained.

No farmer ever made anything running a poorhouse for cows.

Breeders differ as to the breeding powers of the bull when silage is fed. Silage fed in large amounts will have a tendency to distend the paunch, which is very undesirable.

The cow must be fed liberally so that she will have the raw materials to maintain her bodily health and strength and produce large quantities of rich milk besides.

Successful dairymen insist upon a treatment of the cow which will insure health, comfort, and continuous work.

If the milk is kept clean and away from any unusual odors which it will readily absorb, it should retain the natural flavor.

POULTRY

HIGH QUALITY EGGS IN SUMMER MONTHS

One of the biggest problems that faces the poultry producer is the production of high quality eggs through the summer months. The reason for this is the heat of the summer will start fertile eggs to incubate and thereby spoil the quality unless special effort is taken.

The biggest loss can be stopped by the production of infertile instead of fertile eggs. Supplementing and correlated with this effort to produce infertile eggs is the need for careful methods of collecting, storing and marketing.

It is a customary practice for the people who are in charge of enforcing the egg-candling laws to lift the requirements for candling during March and April, for the reason that during the heavy production season the eggs are marketed with good quality. The cool weather, plus the large supply, helps to maintain the good condition of the eggs marketed during this period.

Investigations show that at least two-thirds of the egg losses occur on the farm. The remainder is on the huckster wagons, in the country store, on hot freight and express cars and in improper storage. This loss has been estimated at \$20 per farm in Missouri, and it is doubtless as high in the other heavy poultry-producing states.

No doubt the rooster is responsible for more of this loss than any other one contributing element. He eats high-priced feed during the summer without producing any benefit and does a great deal of harm in lowering the quality of the eggs. The movement to cull the rooster out of the flock is on as soon as the breeding season is over. The young cockerels can be best developed by keeping them separated from the flock, and feed and market them as soon as possible. The cockerels that are to be kept for breeding purposes can be developed better if kept separate from the main flock.

In addition to the loss resulting from the sale of fertile eggs, there is a further preventable loss from cracked eggs, dirty eggs, shrunken and bad-flavored eggs. These different losses may be lowered by feeding oyster shell, by having plenty of nests, by gathering the eggs daily, by packing them so they will not break and eating all odd-sized eggs at home. Bad flavors are usually caused by feeding unusual feeds or by keeping the eggs in a place where they absorb unpleasant odors.

Scurvy-Preventing Feed Manufactured by Fowls

It looks as if the chicken makes its own vitamin C or the vitamin which prevents scurvy in guinea pigs and humans, according to an investigation carried on at the Purdue university agricultural experiment station.

It appears that chickens do not have scurvy and can thrive for long periods on feeds that do not have the scurvy-preventing vitamin. Mature cockerels were given a ration containing none of this vitamin for over three months. Their livers and kidneys were then fed in small amounts to guinea pigs suffering from scurvy brought on by a lack of a vitamin-preventing scurvy. In about two weeks' time the guinea pigs were cured of scurvy by the livers and kidneys of these cockerels which had received none of the scurvy-preventing vitamin, thus indicating that the vitamin was manufactured by some means in the body of the chicken.

This suggests that the chicken can make this vitamin from sources not available to the guinea pig or to a person and that the lack of this vitamin in the diet of the chicken apparently does no damage. In practical poultry feeding, therefore, little attention need be paid to supplying the vitamin which prevents scurvy, although other vitamins are absolutely necessary and must be provided by the feeds given.

Poultry Notes

Fresh, clean water is necessary to the poultry flock.

Losses from tuberculosis in chickens is usually greater in winter than in summer.

Chick specialists now recommend feeding egg yolk or cod liver oil to prevent leg weakness.

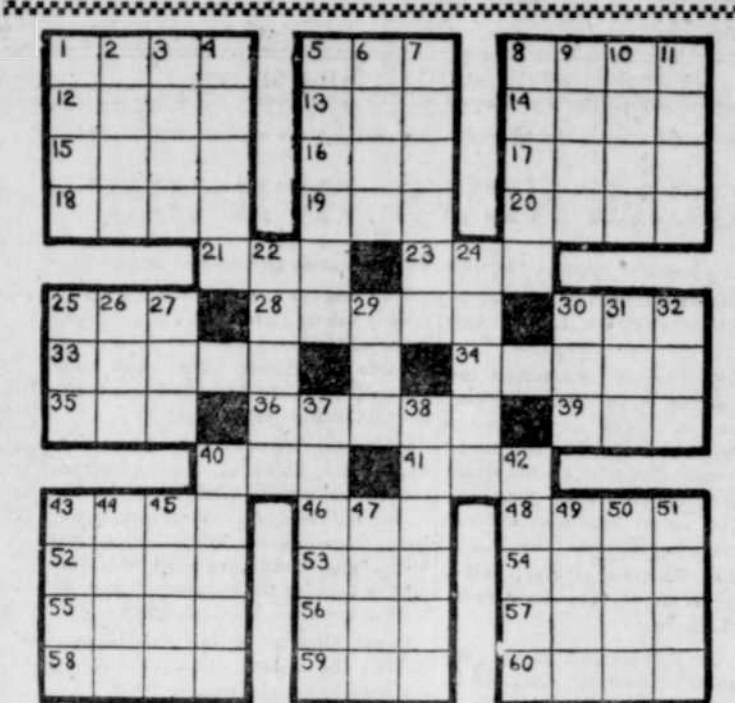
Experience shows that hens must have animal protein in order to lay prolifically. Milk, meatscraps and tankage are the animal proteins most available for feeding poultry.

Cracked barley can be included in the feed ration for chicks after they reach the age of five or six weeks.

It never pays to overcrowd hens—they need a comfortable house, dry and roomy, with plenty of fresh air and sunshine.

Grain feed such as sprouted oats, cabbage, turnips, beets and rape are necessary for the health of the pullets. A disease similar in symptoms to roup is sometimes caused by lack of green feed.

CROSS-WORD PUZZLE

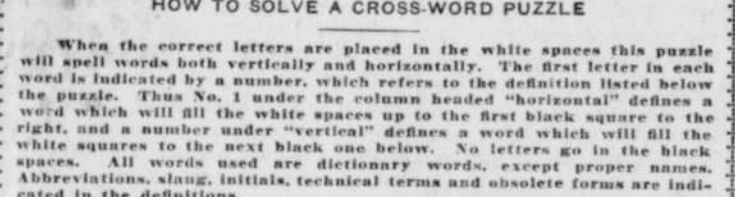


(Copyright, 1925.)

- Horizontal.**
- 1—To note the time of writing
 - 5—A wooden or metal supporting pin
 - 8—Feice
 - 13—A short poem
 - 14—Not early
 - 15—To guide
 - 17—Member of a tribe of Sioux Indians
 - 18—A character in the opera "Lohengrin"
 - 19—To whack (slang)
 - 20—A certain thing
 - 21—To go to court to gain legal redress
 - 23—Belonging to it
 - 25—Assistance
 - 28—A very short time
 - 30—A quid of tobacco
 - 32—To concede
 - 34—A loop in a lasso
 - 35—Even (contraction)
 - 36—Levels
 - 39—A golfing term
 - 43—Part of the verb "to be"
 - 45—An elongated fish
 - 46—A social group
 - 48—An immature insect
 - 49—A precious stone
 - 52—Not short
 - 53—A small spot
 - 54—To pierce, as with the horns
 - 55—To stake or put up
 - 56—The female sheep
 - 57—Related by blood
 - 58—A dam in a river
 - 59—Father
- Vertical.**
- 1—A valley
 - 2—Son of Adam and Eve
 - 3—Social afternoon gatherings
 - 4—Two works in the old Norse
 - 5—One who trifles
 - 6—A precipitous plan
 - 7—Pertaining to the skin
 - 8—Congulans
 - 9—A solemn affirmation
 - 10—A portico
 - 11—An examination
 - 22—To speak
 - 25—To grow old
 - 27—A boy's name shortened
 - 28—Frozen liquid
 - 30—A small bed
 - 32—A river in Wales
 - 37—Peddled
 - 38—Gained as clear profit
 - 40—Wrath
 - 42—Name of Californian who produced a hybrid between a raspberry and a blackberry
 - 43—An animal's nail
 - 44—Single
 - 45—A prefix signifying "against"
 - 47—A western state
 - 48—To prod with something pointed
 - 50—A melody
 - 51—Opposite of borrowed

The solution will appear in next issue.

Solution of Last Week's Puzzle.



HOW TO SOLVE A CROSS-WORD PUZZLE

When the correct letters are placed in the white spaces this puzzle will spell words both vertically and horizontally. The first letter in each word is indicated by a number, which refers to the definition listed below the puzzle. Thus No. 1 under the column headed "horizontal" defines a word which will fill all the white spaces up to the first black square to the right, and a number under "vertical" defines a word which will fill the white squares to the next black one below. No letters go in the black spaces. All words used are dictionary words, except proper names. Abbreviations, slang, initials, technical terms and obsolete forms are indicated in the definitions.

CATS FASCINATED BY BRIGHT LIGHTS

A black cat, lifeless and stiff, lay on the track in the white snow. Beside the body was a bright scarlet stain. The cat had been run over.

"Considering their activity," said the one-armed flagman, "the number of cats run over on the railroad is amazing. Dogs are hardly ever run over. With birds and rats and cows and hogs it's the same thing. But cats, right and left, are mowed down.

"I'll tell you why it is. It is because a locomotive's headlight fascinates a cat. Cats prowls by night and when on the railroad tracks they see the bright yellow splendor of an oncoming locomotive's headlight they crouch down, and with a contented sigh they wait for this lovely thing.

"They wait for it as a youth waits for a beautiful girl. They think, no doubt, that it will bring them happiness. It brings them death."

And pensively the one-armed flagman gathered up the black cat's remains and laid them in a large wooden box.

"There's a market for the skins," he explained.

Ships Well Equipped

The United States coast guard cutters, Tampa and Modoc, which recently sailed from Boston to patrol the shipping lanes of the North Atlantic and protect shipping from the menace of icebergs, are equipped with the highest powered telephone and telegraph radio transmitters of any ships flying the American flag. These two cutters if regulations permitted, could be used as floating broadcasting stations, and they would be more powerful than most of the licensed stations on land. Each ship has a 2-kilowatt telephone-telegraph radio transmitter. The Tampa and the Modoc are also electrically driven ships of the latest design.

Aid to Stone Cutter

Massive one-piece columns as high as 40 feet, have been produced from a single block of Indiana limestone—the column being rounded out in a comparatively short time by means of a machine called a lathe. Years ago stone columns were cut by hand. It required six weeks for one man to cut a 28-foot column. Today the lathe turns out a 28-foot column in three days.

Orange Blossoms

The orange is said to indicate a hope of fruitfulness, and the white blossoms, like the rest of the white of the bridal costume, are symbolical of innocence. Orange blossoms as a bridal decoration were introduced in the United States and England about 1820. The custom was of older standing elsewhere.

Around Orchard

PICK AND HANDLE APPLES CAREFULLY

There are several rules of picking apples which must be adhered to if one expects to pick his crop with a minimum loss. The apple should be grasped in the palm of the hand, so that when being removed from the tree pressure applied to the fruit by the fingers will not injure it. Never grasp an apple with the tips of the fingers. With very large apples the ends of the fingers can be used to help hold the apple and aid in breaking the stem from the fruit spur. With long-stemmed apples the end of the thumb should be placed on the stem. By a slight tipping of the apple it is released from the spur and the stem usually breaks naturally. Short-stemmed apples should also be grasped in the palm of the hand and the stem will often break naturally at the spur by a slight tipping of the fruit. If such apples "come hard" they will often break more easily at the spur by twisting the fruit a half-turn while the apple is still grasped in the palm of the hand.

In picking, the apple should be laid carefully in the picking receptacle, not dropped in. If a picking-bag is used, care should be taken to see that the picker does not lean on the bag so as to squeeze it against the ladder or limbs of the tree or rest it on the rounds of the ladder. As the day wears on it is comfortable to lean against the bag, forcing it against a branch of the tree or a round of the ladder. Many growers favor the use of the half-bags so that undue pressure is not applied to the apples by their own weight.

Considerable damage is often done to the fruit in emptying the picking receptacle into the orchard box. Perhaps you have stood in your orchard when a careless picker was emptying his picking-bag or bucket. It sounds not unlike a gatling gun working in the distance. To give an idea of the possible injury to a bag of apples dropped into a field box carelessly, the following little experiment is interesting.

Fifty-nine Stayman Winesap apples, free from injury, were placed in a picking-bag during the harvesting of this variety. The person using the bag stood with a slightly stooped posture, so that the bottom of the bag, when opened was at a height of three inches above the top of the apple box into which the apples dropped. A count for injuries was made after the apples had dropped into the box. Of the 59 apples, 15.3 per cent were found to be free from injuries; 3.3 per cent had slight bruises; 75.1 per cent had bad bruises, and 3.3 per cent had punctured skins.

Many growers allow the pickers to fill the orchard boxes too full of apples. These boxes should be filled so that the apples are below the level of the top of the box.

Discarded Auto Oil Is Unfit for Spraying Use

Discarded automobile crank-case oil should not be used for spraying fruit trees and other vegetation for the control of insect pests, according to the Ohio experiment station.

Crank-case oil is dangerous because it cannot be diluted readily with water and is almost sure to injure the foliage.

The oils used for spraying trees are quite different from the oils used in automobiles. They have been treated in such a manner that they mix readily with water and they are diluted for using.

Discarded crank-case oil often contains small particles of metal and carbon which are very likely to cause injury to the spray pumps and nozzles, and these obstructions alone would make the use of such oils inadvisable. The main objection to them, however, is the fact that they do not mix readily with water, there is no definite rule for dilution and they usually damage the trees.

Tent Caterpillars Will Travel Long Distances

Tent caterpillars in large numbers have been observed migrating from the wild cherry trees which they have defoliated. These pests will travel long distances and even traverse plowed ground to obtain food.

Newly planted apple or other fruit trees close to wild cherry trees are likely to become infested with these caterpillars and quickly stripped of leaves and shoots. This will severely check growth or even stop it entirely.

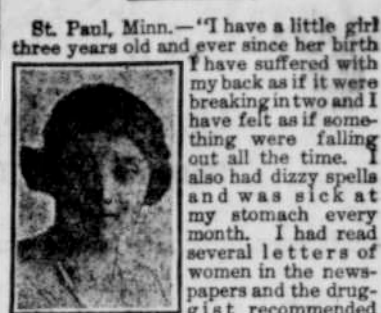
Spraying with arsenate of lead, one pound of the powdered product to fifty gallons of water, is the most effective way of killing the pest on apple and pear trees.

Problems of Peaches

Where borers are attacking the peach trees badly, use paradiichlorobenzene. Often peach trees will gradually die, simply from the attacks of the borers. Where the leaves fall badly from peach trees it may be due to a number of causes. If the foliage has been burned by spray it will sometimes cause a defoliation. The attacks of brown rot will cause the foliage to roll, turn brown and drop, and often cause an injury to the twigs themselves.

WOMAN'S BACK STOPPED ACHING

I Suffered Three Years. Relieved by Taking Lydia E. Pinkham's Vegetable Compound



St. Paul, Minn.—"I have a little girl three years old and ever since her birth I have suffered with my back as if it were breaking in two and I have felt as if something were falling out all the time. I also had dizzy spells and was sick at my stomach every month. I had read several letters of women in the newspapers and the druggist recommended Lydia E. Pinkham's Vegetable Compound to my husband for me. As a result of taking it my back has stopped aching and the awful bearing-down feeling is gone. I feel stronger and do all of my housework and tend to my little girl. I have also taken Lydia E. Pinkham's Liver Pills for constipation. I have recommended these medicines to some of my friends and you may use this letter as a testimonial if you wish. I will be pleased to answer letters of other women if I can help them by telling them what this medicine has done for me."—Mrs. PRICE, 147 W. Summit Avenue, St. Paul, Minnesota.

Green's August Flower
for Constipation, Indigestion and Torpid Liver
Successful for 59 years.
50c and 10c bottles—ALL DRUGGISTS

Cuticura Talcum
Is Soothing For Baby's Skin
Soap, Ointment, Talcum sold everywhere.

New Cathedral Facade Belfast War Memorial

Belfast is commemorating its service in the World War by erecting a new facade for its Protestant cathedral as a victory memorial. The first stone was laid at a ceremony that was given state and civic dignity. The duke of Abercorn attended, as did the lord mayor and corporation of Belfast. The Protestant primate was present and was accompanied by 14 bishops, some of whom came from England. The Presbyterian church was represented by the moderator of its general assembly and the Methodists by the chairman of the Belfast synod. Lord Genavay, chairman of the Free State Senate, attended as an invited guest.

Entirely Satisfactory

Mr. Brown looked up from his evening paper as his wife entered triumphantly. There was a smile on her face that he knew from long experience indicated time well spent. "Well, my dear," said he, "did you have a pleasant day?" Mrs. Brown's smile broadened. "Yes, rather," she answered. "I made three friends of enemies and three enemies of friends."

Fined for Show

Rev. Douglas Montagu Heath, vicar of St. John's church, Harlow, England, was fined \$20 for staging a play in the parish church without a license. There was no charge for admission.

Frequently She Doesn't

"I am another man since I was married." "And does your wife love that other man?"

Genuine **BAYER** **ASPIRIN**
Say "Bayer"—Insist
For Colds Headache
Pain Lumbago
Neuralgia Rheumatism
Safe Accept only a Bayer package
which contains proven directions
Handy "Bayer" boxes of 12 tablets
Also bottles of 24 and 100—Druggists
Aspirin is the trade mark of Bayer Manufacturing of Monoceticochloride of Salicylic Acid

ALLEN'S FOOT-EASE

For Tired Feet It Can't Be Beat
At night when your feet are tired, sore and swollen from much walking or dancing, sprinkle two ALLEN'S FOOT-EASE powders in the foot-bath, gently rub the sore and inflamed parts and relief is like magic. Shake Allen's Foot-Ease into your shoes in the morning and walk in comfort. It takes the friction from the shoe. Sold everywhere. For FREE Sample and Foot-Ease Walking Doll, address, ALLEN'S FOOT-EASE, Le Roy, N. Y.