DAIRY

PRODUCTION OF CLEAN MILK

Do Not Allow Cows to Wade and Live in Filth—Sunlight Is Most Excellent Sterilizer.

There is no one thing in particular to be observed in the production of clean milk. Anything that tends to cleanliness is desired. Keep the cows clean, and do not compel or allow them to wade and live in filth. This means clean yards and clean, well-bedded stalls. Everything short of this is positively repulsive and should not be tolerated any longer in a civilized community.

Stop the filthy practice known as "wetting the teats," by which is meant the drawing of a little milk into the hands with which to wet the

Storrs Type of Milk Pail.

teats before and during milking, leaving the excess of filthy milk to drop from the hands and teats into the pail.

Wash all utensils clean by first using lukewarm water, afterwards washing in warm water, and rinsing in an abundance of boiling water, then exposing until the next using in direct sunlight, which is a good sterilizer.

Use milk pails, cans, etc., for no other purpose but to hold milk.

Keep out of these utensils all sour or tainted milk even after they have been used for the day. Using them for this purpose at any time infects them so badly that no amount of washing is likely to clean them. Bacteria are invisible, and millions can find lodging places in the thin film of moisture that remains after dishes are apparently clean.

Brush down the cobwebs and keep the barn free from accumulations of dust and trash.

Whitewash the barn at least once a year.

MAKE-UP OF YOUNG HEIFERS

Inheritance of Quality and Quantity of Milk Seem to Be Separate—Lots to Be Learned.

Roughly speaking, 25 per cent of sire or dam is transmitted to the offspring. Where a test such as milking quality can check this the female will show a slight preponderance, 29 per cent.

This refers to high-producing cows, and with them the ratio of high to medium offspring is about half and half, while with medium producing cows with better bulls the high producers would be but one high to seven medium. There are indications, though no proof, that production is linked to a sex factor, milk production being so closely interwoven with sex.

Inheritance of quantity and quality of milk seem to be separate, the number of fat globules in a given quantity of milk being about the same, the difference in the per cent of fat being due to larger globules.

There is a chemical difference between large and small globules, the former containing softer, lighter fats; the character of the fat may also determine the size of the globule. Probably much of the heredity for production lies in the size and character of the globules. We are still in the stage of investigating these things without being able to make positive statements, but the young dairyman will come to more positive knowledge by and by.

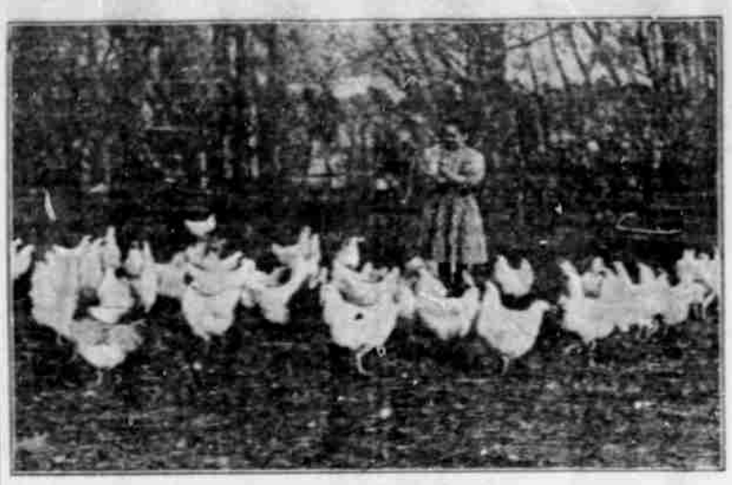
Shape of Silo.

The tall, slender type of silo has rapidly come into favor and has replaced the wider type, formerly constructed. There is a very good reason for this, since a larger amount of silage can be stored in a given space in this new type on account of the greater compression of the lower layers. Furthermore, there is little or no danger of spoiling in the case of a silo of small diameter, because a good layer of it can be fed off each day.

Separate Pen for Calves.

Where valuable calves are raised it is advisable to have a separate pen for each animal. Calves should be fed in a stanchion. The most common trouble in calf raising is scours, or indigestion. This is brought on by overfeeding, feeding sour or old milk, cold milk and dirty pails, troughs or stalls. Success depends largely upon the ability of the feeder to prevent scours.

ATTENTION TO POULTRY IN THE SCHOOLS



A Fine Flock of White Leghorns.

During the past few years several of the states have had under consideration the question of including in the regular courses a branch devoted to poultry culture. This has been met with favor in some parts of the country, but the idea has not been tried out enough yet to prove whether or not it will be of value to the pupils. It should be understood, however, that the main purpose of such courses is to benefit only those who intend to go into farming (or poultry farming) upon completion of their school education.

The general plan is to include such a course in the last two years of the pupils' grammar school education. By the time that the pupils have reached these grades it is presumed that they are ready to absorb the more material things of life and to more readily reap the benefits from such a course.

There is one place, however, in the schools where poultry is not receiving the proper amount of attention. This is in the rural schools, where the practice of poultry keeping should be taught to every pupil in the school and should form a part of the regular courses—and an important one, too.

We can readily understand that all the teachers in these school have all that they can do to keep up the regular work of the pupils. The plan given below, however, if started with the right idea in the minds of the pupils, will not result in any more work on the part of the teacher other than a careful watch on the progress of the "contest." Interest in the work may be lost at times and this is the only thing that the teacher will have to watch—to avoid any lagging and to keep the pupils keyed up to the proper point of interest in their work.

In the first place, the matter should be taken up with the entire school and the proposition put up to them. They should be told that the scheme is to allow two groups of pupils each to have a pen of about six hens and a rooster. If there are eight grades in the school, the grades would be divided equally so that the First, Third, Fifth and Seventh grades would have one pen and the Second, Fourth, Sixth and Eighth grades would have the other pen. A small prize of some kind would be offered to the group whose pen made the best showing during the school term, it being understood that each group would have entire charge of the birds in their pen and would take care of them. One of the older pupils would be appointed to keep track of the eggs laid and of the money spent for feed for each pen.

Cheap colony houses could be built for the pens and they should be separated from each other so that the hens from one pen would not go into the other house to lay. The teacher could see that sensible coops were built for the birds and after the contest was started all that would have to be done would be to hear the weekly reports from each pen. In order that competition should be kept up among the classes, these reports would be read at the close of school each Friday by the person mentioned above (appointed to keep record of the pens).

If the idea of such a contest proved popular with the pupils, it is probable that the parents of some of them would be glad to loan them the chickens to carry out the contest. It is also probable that the eggs received from the pens could be taken to town by some of the older people, and the feed purchased by them as well. The financial part of the proposition, however, should be left with the pupils, and it would be necessary for them to first raise a small fund for the cost of feed and the necessary lumber—unless they are fortunate enough to secure a couple of large packing boxes, which would be good enough to answer all purposes for such small flocks.

TASK OF RAISING PHEASANTS

Birds Are Farmers' Friends as They Live on Insects and Weeds—Ringnecks Are Hardy.

Ringneck pheasants are very hardy; they live in zero weather in an open field without shelter, and each hen averages eighty-five eggs a season. Eggs are hatched and raised by chickens, and the birds mature in six months. They weigh about three pounds at maturity, are free from most diseases, and live on one-tenth of the amount required by chickens.

Pheasants are farmers' friends; they live on insects and weed seeds. Pheasant eggs hatch in about twenty-three days, and the birds sell at a dollar a pound in market. They are much easier to raise than chickens. Every law for the protection of game should make it lawful to keep in captivity any bird for the purpose of raising birds of that kind, and provide that any person who hatches birds in captivity may sell, ship, or otherwise dispose of them.

England long ago saw the wisdom of such laws, with the result that 24 firms known as the Farmer Associates were reported by the Shooting Committee Field Sports Guild to have had in the season of 1913-14 in their raising pens 75,000 pheasant hens, no account being made of males.

DIVIDE THE CHICKEN FLOCK

Where Pullets and Cockerels Are Separated Best Results Are Secured—Keep Chicks Growing.

(By N. E. CHAPIN.)

The best results are secured if the pullets and cockerels are separated when eight or ten weeks old. The pullets must be kept growing and developed for early laying to bring the most profit. Early hatched pullets should begin laying when five or six months old. Unless the cockerels are of exceptionally fine stock they may be forced and sold as broilers or roasters and will often bring more per head in early summer than they would if kept until autumn. The chicks should be kept growing and developing from birth to sale or maturity to give satisfactory returns.

Breed Great Layers.

We must remember that the laying hen is the paying hen; that after a hen has laid enough eggs to pay for her keep for the year, then all the eggs she produces will be on the profit side of the ledger. So it stands us in hand to breed for the great layers. It can be and is being done.

FEED FOR DUCKS AND GEESE

One of Best Rations for Winter Is Bran, Shorts and Corn Meal, Mixed With Vegetables.

(By C. E. BROWN.)

Geese and ducks are very similar in their habits of eating. Some recommend feeding the grain whole, but we prefer feeding it ground, especially in winter, as this enables us to mix the green feed with it. Bran, shorts and corn meal or barley meal, equal parts by weight, mixed with clover leaves or boiled vegetables, is one of the very best rations for winter. Milk mixed with it improves it greatly. We have secured fairly good results from feeding boiled roots, shorts and milk, but the addition of small amount of grain gives better results. For summer feeding the geese require nothing but good pasture while the ducks do well if fed whole grain once a day in water if rapid growth is not desired.

POULTRY NOTES

Don't feed cut green bone to growing chickens.

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Grit should be supplied the fowls at all times, as it aids digestion.

• • •

Don't let the little chicks out in the wet grass until they are well feathered out.

• • •

Get the roosters all out of the way. Yard them by themselves for the next six months.

• • •

The feed hopper should be placed at least six inches from the floor, so that the hens cannot easily scratch dirt or litter in it.

• • •

Like the dead hen, the rotten egg should be buried or burned and not allowed to proclaim its rottenness any more widely than necessary.

• • •

How about moving the chicken coops to the cornfields? The fowls will eat off scores of bugs and worms and not hurt the corn a particle.

• • •

It will be a good plan if the old hens can run in the orchard or corn field the rest of the season, where there are lots of bugs and worms to destroy.

• • •

Dry forest leaves form an excellent article for putting in the poultry scratching shed, and make a fine fertilizer for the fields after being used.

POULTRY

PREPARE GEESE FOR MARKET

While Fattening Young Fowls They Should Be Kept Free From All Excitement—Keep in Pen.

The first feed for goslings is grass, fed on sod; a small allowance of corn meal, slightly moistened, is also given them. Sand and charcoal are sometimes mixed with the corn meal. They are fed on the above food three times a day for a couple of days, when they are given a ration composed of equal parts, by measure, of bran, middlings, and steamed cut clover or cooked vegetables. This feed is given them morning, noon, and night until they are eight weeks old, when they are penned to be fattened for market at ten weeks old.

To fatten young geese, place them in a pen, not too large, so that they will not exercise too much, and feed three times a day all they will eat up clean of the following: Corn meal mixed to a dry, crumbly state, and beef scraps amounting to 20 per cent of the bulk of the corn meal. While fattening young geese they should be kept as quiet as possible; no excitement whatever should disturb them. When feeding approach them quietly, and do not irritate them in the least or they will not fatten, but will "throw out" or grow another crop of feathers. At ten weeks of age, or when the tips of the wings reach the tail, they are ready for market and should weigh between eight and ten pounds.

When young goslings are to be dressed for market, they are killed by cutting them in the roof of the mouth, severing the artery, or by stunning them by hitting them a sharp, quick blow on the head. The picker uses a box in front of him about the height of the knees, holding the bird with the left hand and clasping the feet and wings together; he places the head of the bird against the box and holds it

Embden Goose.

in place with the knee. Pick the feathers from the body of the bird, then dampen the right hand and brush the body to remove the down. Leave about two inches of feathers on the neck, and also leave feathers on the wings at the first joint. Lay the wings against the body of the birds and tie a string around to hold in position. Place the birds, when picked, in cold water for an hour or so to plump them; if they are in the water too long they are liable to bleach and become water-soaked. They are then iced up in barrels ready to ship to market.

Young geese should be marketed before cold weather sets in. It is much harder to dress a gosling in cold weather. The feathers set tighter, and in picking them the flesh is torn.

ERADICATE THE ROOST MITE

Insects Are Easily Exterminated by Use of Kerosene Oil—Prevention Better Than Cure.

(By A. C. SMITH, Poultryman, University Farm, St. Paul, Minn.)

Roost mites are very common and troublesome. When they become numerous enough, they not only infest the nests but other parts of the building, especially cracks and crevices, as well as the roosts. They are much like tiny spiders and are often called spider lice by poultrymen.

Mites are easily exterminated by applying kerosene to all infested parts of the building. They become numerous as soon as warm weather comes. As prevention is better than cure, it pays to paint your roosts once every four to six weeks in winter time and once every two weeks during the warm weather. You will probably never see a mite in a house so treated.

Fowls in an Orchard.

Fowls running at large in an orchard do an infinite amount of good in the destruction of larvae, worms beetles, bugs, etc.

Good Cleanser.

Fresh earth in the dust bath will aid materially to cleanse the feathers and skin of impurities, effete matter and lice.

FROM THE SWEET POTATO

Innumerable "Goodies" May Be Made by the Housewife Who Gives It a Little Thought.

For candied sweet potatoes cut parboiled sweet potatoes into lengthwise slices and put them in buttered pan. Cook for two minutes three-quarters of a cupful of water and two tablespoonfuls of butter. Brush the potatoes with this and bake them. Baste them with the sirup as they cook until they are well candied.

Sweet potato balls that cause surprise are these: Season two cupfuls of baked sweet potatoes that have been pressed through a colander with salt and pepper and add a beaten egg and a little hot cream. Form into balls and into each press a pitted prune into which two walnut meats have been forced. This prune should not be visible. Dip the balls into crumbs and egg. Then brown the potato balls in deep fat, drain and serve at once.

Scalloped sweet potatoes are made by slicing parboiled potatoes into a battered baking dish and covering them with a well-seasoned white sauce. On top of the sauce put some melted butter and crumbs and bake for about twenty minutes.

French fried sweet potatoes are truly a delicacy. To make them, cut in thick lengthwise sections some parboiled sweet potatoes and plunge them in a frying basket, into deep hot fat. Brown delicately, drain and season with salt.

GLEANINGS FROM COOK BOOK

Knowledge of How to Do Certain Things Will Save Housekeeper Much Trouble.

Just a suggestion of how to do certain things will often be the means of saving the housekeeper a great deal of trouble. Here are a few gleanings from a famous cook book which may prove interesting to some reader.

To cut cheese smoothly, fold paraffin papers over the knife blade.

When making omelets allow one tablespoonful of cream or hot water for each egg.

One cupful of sugar will sweeten one quart of any mixture which is to be served cold or frozen.

New sweet potatoes will not be so hard and dry if rubbed with butter before baking.

When the white of an egg is beaten to a froth and added to the cream it will whip more quickly and easily.

After cooking cabbage add to it, just before serving, one small half cupful of thick sour cream. This is much better than vinegar.

When currant bread has been baked, if it be wrapped in a damp cloth for a few days it will not crumble when cutting, and it will not be dry.

The flavoring of shrimps is improved if boiling water is poured over them a short time before they are served. It must be drained away immediately.

Housewifely Hints.

Now is the time to hang fresh bags of lavender in one's wardrobe and lay it plentifully among personal and household linen. Tiny sachets of it sewn into one's garments not only exude a delicious fragrance wherever one moves, but are an excellent preventive of infection. Lavender is the favorite perfume of both Queen Alexandra and Queen Mary, who get a large consignment, freshly distilled for them, from Mitcham each year and use it in great quantities. All the cushions in the queen mother's boudoir are filled with a certain amount of new lavender every summer, so that the room is always full of the delicate English perfume.

New Chicken Salad.

Take one cupful of cold chicken that has been chopped and shredded until very fine and one ounce of pate de foie gras. Add to it one ounce of cooking sherry, the beaten yolks of two eggs and a cupful of clear chicken broth. Season to taste with salt and cayenne. Heat the mixture through and cool. Add one ounce of dissolved gelatin to a cupful of whipped cream. Beat the whites of three eggs to a froth and mix all lightly together. Put in a mold and set on ice six or seven hours. Serve on a bed of green with mayonnaise.

Walnut Cream for Filling.

One and one-half cupfuls milk, scalded; one egg well beaten, scant one-half cupful sugar, dessert-spoonful each of salt; mix all with the egg, add to the milk and cook in double boiler until thick. When cool flavor with vanilla and add one cupful of walnut meats, ground fine. Spread on cake. If you prefer use a white frosting on top and decorate with whole nut meats.

Mustard Poultice.

This is used for a counterirritant in case of a pain in the chest, backache, etc. Into one gill of boiling water stir one tablespoonful of Indian meal; spread the paste thus made on a cloth and spread over it one teaspoon of dry mustard. Equal parts of mustard and flour made into a paste and spread between two pieces of muslin make a mustard plaster.

Spiced Limes.

Boil four quarts of limes in water until tender, drain off water, cut the limes in halves, put them in a jar and pour over them this sirup: One cupful of vinegar, 1½ cupfuls of molasses, cupful of water, two teaspoonfuls of cloves. Boil a few minutes, then pour over the limes. They should be kept a little while before eating them.

FARM STOCK

WINTER SHELTER FOR SHEEP

Wise Shepherd Will See That Arrangements for Protection of Flock Are Good and Sufficient.

The shepherd who is wise enough to be prepared for wet wintry days and cold winter nights does not dread losses from pneumonia, and the mortality in the lambing season of next February and March that will come from breeding ewes that have been weakened by exposure. As winter begins to draw a little nearer, he sees that his sheltering arrangements are all that they ought to be.

It does not matter whether the sheds used by the sheep are so very warm or not. But they must not be so open that the wind can whistle through them and there must be plenty of ventilation, says a writer in Farm Progress. Plenty of light and ventilation, and freedom from drafts are the main considerations. The warmth of the shed is less important than the necessity of a good, sound roof.

I never put more than fifty sheep in a single shed. More than that number will be hard to manage and the chances of accidents among ewes with lamb will be greatly increased. The shed ought to be about twice as long as it is wide and there should be ample room for every animal to lie down inside its doors without the appearance of crowding the place. The floor must of course be absolutely dry and remain that way.

The feeding rack should be placed on one side of the shed and should consist of a flat-bottomed trough at the bottom, surmounted by a well-

A Shropshire Sheep.

built rack, made of slats nailed about three inches apart. Put it out far enough from the side wall so that the ewes may feed at it from both sides.

Where the space is not great enough to allow the rack to be built out from the wall so sheep can feed from both sides, the bottom of the rack will have to be built slanting enough to slide all the grain, hay, chaff, trashy bits of forege and leaves, down to the side where the sheep are feeding. This will keep the far side of the rack from filling up with moldy feed.

RINGING THE VICIOUS HOGS

Unruly Sows Inclined to Make Trouble of Various Kinds May Be Subdued by Use of Ropes.

When the sows get unruly and inclined to make trouble of various kinds they can be readily controlled by an arrangement made of ropes and placed around the jaws of the animal. Such a rope is not easy to put in position with an angry hog, so a little device made of an old broom handle is used. Insert a small hook in one end of the handle and near the other end nail a strap, which, fastened so as to form a loop, will enable one to get a firmer grip on the handle. Then take the rope and make a slip noose in one end, hang it from the hook on the end of the small pole and, with a quick movement, place the loop over and around the upper jaw, when the mouth is forced open. Take hold of the rope with one hand just above the noose and with the help of the ringer insert the ring or rings on the snout. The animal will be unable to fight much with this appliance around its jaw.

GROUND WIRES SAVE STOCK

Gives Considerable Protection From Lightning and Is Profitable Investment for Farmers.

(By FRANK M. WHITE, Wisconsin Agricultural College.)

Grounding fence wires affords considerable protection from lightning and is a worth while investment for farmers.

As hundreds of valuable animals are struck by lightning in this state every summer, many of the casualties being directly due to currents carried along pasture fences, such advice is particularly timely.

To secure the best results ground wires ought to be placed about one hundred feet apart and closely stapled to the post, so as form a contact with every one of the fence wires. The ground wires should also extend slightly above the fence post, and, like a lightning rod, should penetrate the soil far enough to reach moist earth. No. 8 or 9 wire is most satisfactory for this purpose.