

# DAIRY FACTS

## SELECT BETTER DAIRY COWS

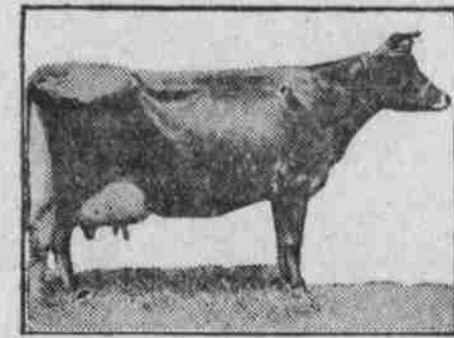
Raising of Best Hefler Calves Will Provide Means of Cutting Out Low Producers.

(Prepared by the United States Department of Agriculture.)

The war has greatly increased the demand for dairy products, and it is important that they be produced economically. In order that the quantity of dairy products may be large and the production economical, more and better cows are needed. The raising of all the best heifer calves will provide cows enough to permit the culling out of all low producers.

Every owner of dairy cows should establish a definite standard, and all cows that do not measure up to the requirements should be disposed of for beef. Whether a dairy cow should be rejected or retained should depend ordinarily on production, as shown by the milk scales and the Babcock test.

Farmers who are too busy to test their own cows may now have this work done for them at nominal cost by joining a cow-testing association. Such an association ordinarily is an organization of about 25 dairy farmers who co-operatively employ a man to keep records of their cows. The tester



Jersey Cow With All the Markings of a Good Milk Producer.

spends one day each month with each member, tests and weighs the milk for butterfat, weighs the feed, both concentrates and roughage, and advises the farmer concerning the quantity and kind of feed to be given each cow in the herd. From the quantity of milk, the butterfat test and the cost of feed, he helps the farmer to determine which cow should be rejected. He also aids in the selection of calves, in improving the sanitation of the barn, milk house and dairy utensils, and in many other ways assists in lifting the dairy business to a higher level.

There are now 472 cow-testing associations in the United States, and last year monthly records were kept for 261,831 cows, or about 1 per cent of all the dairy cows in this country. The cows in the associations whose records have been tabulated averaged 247 pounds of butterfat, or about 50 per cent more than the average production of all the dairy cows in the United States. If all the dairy cows in the country could be brought up to the average of the cow-testing associations, production would be increased 50 per cent in quantity and the cost of production would be considerably reduced.

## TEMPERATURE FOR CHURNING

Much Depends on Season of Year, but is Usually From 52 to 60 Degrees in Summer.

(Prepared by the United States Department of Agriculture.)

The desirable temperature at which to churn is that which makes the butter granules firm without being hard. This is usually obtained under normal conditions when the churning occupies 30 or 40 minutes. The necessary churning temperature depends upon the season of the year and certain other factors, but is usually from 52 to 60 degrees Fahrenheit in the summer and from 58 to 60 degrees Fahrenheit in the winter. If the cream is churned at 62 degrees Fahrenheit in winter, and the butter comes in 35 minutes, with the granules firm, it will be noticed, as summer approaches and the cows are turned out to pasture, that the cream churns more quickly and the butter is softer. This is an indication that a lower churning temperature should be used, and thus from season to season the churning temperature is regulated so that the butter granules may have the proper firmness.

When the temperature is either too low or too high, undesirable results are obtained. A low temperature prolongs the churning period unnecessarily, and may even make it impossible to churn butter. It causes the granules, especially when the cream is thin, to form in tiny pellets, like fine shot, many of which run out with the buttermilk. The working of the butter and the incorporation of the salt are accomplished only with great difficulty, and the body of the butter is liable to be brittle and fallow. Adding hot water to cream to warm it, and using wash water more than three degrees warmer than the butter in order to soften it, are bad practices since they injure the quality of the butter. If the proper churning temperature is used, the butter granules will be of the proper firmness.

## CAPONIZE MALES FOR CHOICE FOOD

One Way of Answering Call for Greatly Increased Supply of Poultry and Meats.

### HAS CONTENTED DISPOSITION

Breeds Best Adapted for Purpose Are Plymouth Rock, Brahma, Cochon, Cornish, Langshan and Wyandotte—Leghorns Too Small.

(Prepared by the United States Department of Agriculture.)

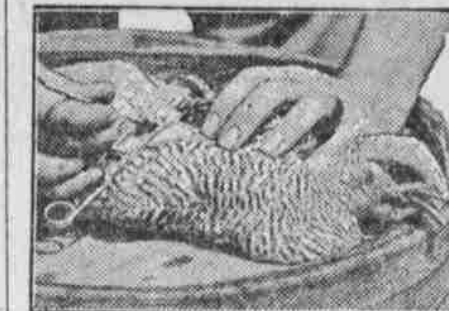
Caponizing the surplus cockerels is one way of answering the call made by the United States department of agriculture for a greatly increased production of poultry and meat. Capons, the name applied to unsexed male birds, are to the poultry dealer what fat steers are to the beef packer—the source of the choicest food product of their kind. Like the steer the capon has a contented disposition. It develops more uniformly than the cockerels, and, as it fattens more readily, is larger at the same age. This coupled with the fact that the flesh of capons retains the softness and tenderness of young birds and is, therefore, of superior quality, causes them to command a better price on the market.

Since capons must be held and grown until winter they take up some room which might be used to better advantage for laying hens. In such cases it may be advisable to fatten the surplus cockerels and sell them as broilers. Another consideration is the local market, which must show the demand for capons.

Best Breeds to Caponize. Large capons bring the best prices, and it seldom pays to caponize males of the small breeds, such as Leghorns. Breeds best adapted for this purpose are the Plymouth Rock, Brahma, Cochon, Cornish, Langshan, and Wyandotte.

Cockerels should be caponized as soon as they are large enough for the operation to be performed easily, usually when they weigh from 1½ to 2½ pounds, or when they are from two to four months old. Cockerels can be caponized when larger and older than this, but at such time there is more danger of loss of blood, and extreme care must be exercised to prevent the birds from bleeding to death. Caponizing is usually done in June, July and August.

Cockerels to be operated upon must be confined and given no feed or water for 24 to 36 hours. This serves to empty the intestines and enables the



Performing the Operation.

testicles to be located and removed more easily. The bird is laid upon its side on a box, head of a barrel or a table of convenient height, and held in a stretched-out position by means of cords passed about the wings and the legs and weighted with weights equivalent to that of half bricks. The operation must be performed out of doors in a sunlit space, or else artificial light must be reflected into the body cavity in order to allow the operator to locate and remove the testicles.

Use Sharp Knife.

Make the incision with a sharp-pointed knife between last two ribs, but before making the incision pull the skin down toward the leg. Then when the operation is over and the bird is released, the skin slips over the wound and closes it. Insert the spreader and enlarge the cut sufficiently to allow the introduction of the testicle remover, but do not cut too far toward the backbone, or into the fleshy part of the body wall, as that will cause profuse bleeding. A thin membrane will be observed covering the intestines. This must be torn with the sharp-pointed hook. The intestines are then exposed and these are pushed aside, two small, white, yellow (sometimes dark colored) bodies will be observed, one on each side of the backbone, and close to it. These are the testicles. Remove these with the testicle remover, taking the lower one first. Persons not expert at caponizing find it impossible to locate the lower testicle. In this case, the upper can be removed, the bird turned over, and the other testicle removed through an incision on the other side. Care must be observed in removing the testicles not to prick or rupture the arteries which run close to them. Should this occur, the bird will bleed to death. Be sure that the entire testicle is removed. If a piece is left, the bird will act and look like a cockerel instead of a capon, and will sell for less than capon prices. Such a bird is known as a slip. It is advisable for a beginner to practice this operation upon a dead fowl. The place to make the incision, the location of the testicles, etc., can be definitely learned in this way and confidence gained in caponizing live birds.

## HOME-GROWN PROTEIN FEEDS

Stockmen Should Plan to Produce an Adequate Supply of Leguminous Crops This Year.

(Prepared by the United States Department of Agriculture.)

Clover, alfalfa, soy beans, cowpeas and vetches can be profitably produced on every live stock farm in the country and it is of great importance that an adequate supply be grown this year to furnish feed for live stock. These leguminous crops are comparatively rich in protein. The recent prices of feeds which are rich in protein have been so high as to prey vitally on the net profits which otherwise would have accrued to the producers of live stock.

Varieties of seed of the crops mentioned have been acclimated and rendered practical for production in nearly every section. The man who is unable to raise clovers, vetch or alfalfa on his farm, can resort to soy beans and cowpeas. The latter crops can be grown for either concentrates or roughage use and as such enable the stockman to prepare a well-balanced ration of home-grown feeds which contain a sufficient supply of protein. They enable him to reduce his feeding cost very materially and do away to a large extent, with high-priced cottonseed, lin-



A Good Field of Alfalfa in Kentucky.

seed and peanut meals, which range in protein content from 36 to 50 per cent and cost at the present time from \$30 to \$85 a ton.

The crop of soy beans and cowpeas can be utilized in a number of ways. They can be used for grazing or soiling purposes, be converted into hay or silage, or harvested and thrashed and used for feeding or seedling purposes. Every farm equipped with a gasoline engine and a small power grinding mill can readily convert any surplus cowpeas of soy beans into meal. It is essential that these grains be ground in combination with corn, usually one part of beans or peas to three or four parts of corn. When ground alone the excessive oil in the leguminous grains will cause the mill to gum up.

Solve the problem of high-priced feeds by growing crops rich in protein on your own farm.

## CONSUMPTION OF CORN CROP

Urgent Reason for Increasing Production Is Absolute Need of More Grain for Food.

(Prepared by the United States Department of Agriculture.)

Approximately 85 per cent of the corn crop of the United States is consumed upon the farm. One and one-half to 2½ per cent is exported and the remainder is used in manufacture or otherwise consumed. During the last ten years the demand for corn has increased and at times the supply has been inadequate to meet it. This has led to the importation of corn from Argentina. While the amount imported has reached in some years a total of something more than 7,000,000 bushels, it is so small in comparison with the production in this country that corn imports are not an important factor in the corn trade.

However, this importation does call attention to the need of increasing the corn production in this country. But a much more urgent reason for increasing production is the absolute need of more food grains in the present world crisis. In 1917 the acreage planted to corn was the largest in the history of the country, nearly 120,000,000 acres, and exceeding the 1915 planting by about 15 per cent. The production is estimated at 3,159,494,000 bushels, the largest crop ever harvested. There seems to be every reason to believe that our own welfare and that of the allies in the world's war, as well as of neutral nations, will make desirable an even greater production of corn in 1918 on an acreage approximately equal to that planted in 1917.

## NEED SELF-DEPENDENCE

(Prepared by the United States Department of Agriculture.)

We will not win this war unless states and communities rise to the emergency of solving local problems without dependence upon Washington. This is true state sovereignty and local self-government and is effective loyalty to the nation.

Alfalfa as Honey Crop. In some of the western states alfalfa is the principal honey crop, and like the clover it produces a clear honey of fine quality and flavor.

## Horticultural News

### SELECTION OF ORCHARD SITE

Great Importance Is Attached to Favorable Location—Peaches Favor Light Soils.

(Prepared by the United States Department of Agriculture.)

Too much emphasis cannot be placed upon a suitable location and site of the peach orchard, because a faulty choice of either may be fatal to future financial success. Some mistakes in planning an orchard may be overcome as the trees develop, but a poor location or site cannot be changed.

It is the current opinion that the peach should be planted on sandy or some of the lighter types of soil. Excellent results may follow the planting of orchards on such soils, but peaches do well also on a wide range of soil types, including even some of the moderately heavy clay loams and clays. But whatever the type, a soil must be thoroughly well drained. Peaches will not succeed on poorly drained soils. The heavy clay types which are so hard and impervious that water does not percolate through them readily are to be avoided. Moreover, the soil should be moderately fertile. One very rich in nitrogen is not desirable as a general rule, since it may induce an excessive growth of foliage.

Where alkali soils occur, they should be avoided. While the peach tree can be grown where there is a limited amount of the alkali salts, they cause blight if present in large quantities. It is safer, therefore, to avoid them as far as possible.

Generally a site that is elevated considerably above the surrounding areas is to be preferred for a peach orchard. Cold air settles to the lower levels. For this reason it is often colder at the lower elevations than it is at higher points. The occurrence of frost in low places when there is none on elevated areas is thus explained. During the past few years the importance of selecting relatively high sites for peach orchards in order to avoid the effects of unfavorable temperatures has been emphatically demonstrated in many different parts of the country.

When an orchard has a site adjacent to a body of water of sufficient size and depth to have an appreciable influence on the local climate, the importance of a relatively high elevation largely disappears. Because water warms up in the spring more slowly than the atmosphere, it acts in effect as a refrigerator, making the tem-



Typical Peach Orchard Site in Mountainous District—Ridges Which Are Well-Drained Are Usually Admirably Adapted for Peaches.

perature in its immediate vicinity colder than at points somewhat distant from it. Vegetation within the zone of this influence advances more slowly in the spring than it does outside of that zone. The tendency is for the blossoming of peach trees within the zone to be delayed until after the season of spring frosts is past.

In the fall, frosts are delayed. The water, having absorbed much heat during the summer, cools off in the fall more slowly than the atmosphere and tends to keep the temperature within its zone of influence warmer than it would otherwise be.

The slope factor is largely one of degree. Peach trees on a site having a very steep southern slope will usually blossom and the fruit will ripen somewhat earlier than on a corresponding northern slope, but where the differences in slope are only moderate their relative influence on the time of blossoming and ripening is not very marked.

Aside from economic factors, temperature probably is the most decisive limiting factor in the distribution of commercial peach growing. Usually the fruit buds are the first to suffer injury. No absolute minimum temperature which the peach is able to withstand without injury can be given. The condition of the buds with regard to their strength, vitality, and perfect dormancy, the duration of the critical temperature, the climatic conditions following the cold period, perhaps the amount of moisture in the air during the period, and other factors all have an influence.

## The KITCHEN CABINET

The chief reason that everybody is not successful is the fact that they do not have enough persistence. Do one thing well, throwing all your energies into it. The successful man, unlike the poet, is made, not born.—John Wanamaker.

### CHEESE DISHES.

As we produce such large quantities of cheese in this country and as just now we are asked to use cheese, particularly cottage cheese, a few ways of preparing cheese dishes will be appreciated.

Take the bits of dried cheese, grate them, not wasting a bit; this may be used as a flavor for milk toast, and a cream of cheese soup, in escalloped dishes, as sandwich fillings and in numerous ways which will occur to any thinking cook.

Cottage cheese with chopped cherries makes a most delicious sandwich filling—at least the college girls never find half enough to go round.

An omelet sprinkled with a generous spoonful or two of grated cheese will make a much more nourishing dish. Put the cheese on just as it is folded.

Cheese canapes may be served as first course at dinner or luncheon. Spread the well-seasoned cottage or cream cheese on well-buttered bread, cut in rounds or shaped in any form desired, finish with a border of finely chopped olives and a piece of pimento cut in fancy shape for the center.

Cottage cheese with boiled dressing served on lettuce is a most delicious salad combination.

Cheese Sandwiches.—Mix grated cheese with cream, season with chopped chives, a dash of paprika and salt to taste; spread on bread cut in rounds, put together in sandwich fashion, then brown in a bit of sweet fat until brown on both sides. Serve hot with a plain lettuce salad.

Cheese Croquettes.—Melt three tablespoons of sweet fat, add a fourth of a cupful of corn flour or barley flour, mix well and when well blended add two-thirds of a cupful of milk; cool slowly, add two well-beaten egg yolks and half a cupful of good-flavored cheese grated. As soon as the cheese is melted take from the fire, season with salt and pepper and spread out to cool. Make into balls, dip in egg white and crumbs and fry in fat.

Cream cheese with chopped Marichino cherries or with canned or candied cherries is a good combination.

Cheese Salad.—Grate half a pound of cheese and mix it with a boiled salad dressing, or a mayonnaise, enough to make it creamy. Put it through a potato ricer on head lettuce and serve with bits of chopped olives for a garnish. Grated maple sugar, chopped almonds and cream make delicious sandwich filling and quite in season.

Well to suffer is divine; Pass the countersign, "Endure." Not to him who rashly dares, But to him who nobly bears, Is the victor's garland sure.

### LET US REMEMBER.

A woman's hands should have as much care as her face, for they are fully as much in evidence. Do not use a stove-lid lifter or a stick of wood for a hammer; have a tool box in the kitchen where such things may be quickly found. Bruised nails and gouged fingers are painful and often stay with us for months.

There is no economy in using old or worn-out utensils; learn to keep up-to-date equipment in the kitchen. A workman is known by his tools.

Use small wooden spoons for stirring and avoid burns, as they never get hot in the dish over the heat.

Have a soap suds, in which gather all pieces of unscented soap to use in the dishpan; this will be a saving of both soap and the hands.

Save steps by using a tray or a wire dish drainer in removing dishes from the dining table. One trip saved is worth the mental effort and many times the trips may be divided by ten.

When standing for any purpose, such as ironing, if a stool is not convenient to use, fold a heavy rug to stand upon. The spring under the feet will make a great difference, taking the pressure off the tired feet.

Good sharp knives, a reliable can opener and a good knife sharpener will save the temper which is often ruffled by poor tools.

A bottle of kerosene should be kept near the sink, which may be rubbed after each washing with a cloth dampened in the coal oil; this will take off soil and clean the sink much quicker than any powder or soap will do.

A roll of soft absorbent paper is invaluable in the kitchen. It may be used to wipe up spots on table or floor, or to remove waste from dishes, thus saving in the dishwashing.

When food burns on, in a dish, do not scrape it, but put a teaspoon of soda and enough cold water to cover the bottom and let it simmer for an hour or two; then if there are any obstinate spots, rub with a piece of pumice stone, which will not leave bad scratches to roughen the surface.

There are nettles everywhere, But smooth, green grasses are more common still; The blue of heaven is larger than the food. —E. B. Browning.

### FOODS WITH MIXED FLOURS.

As rye flour is now on the "don't use" list, we must not use it as a substitute for flour. In many homes where rye is still found in quantities it should be used sparingly, as it will not be plentiful as long as it is used as food for the armies. In many of our war recipes we find whole wheat flour used as a wheat substitute, which it is not. Whole wheat flour used with barley flour to lessen the use of wheat is justified, but the use of whole wheat flour as a wheat substitute is not conforming to the rules of conservation.

Honey Drop Cakes.—Mix a half cupful of any sweet fat with a cupful of honey; add a half cupful of sour milk, a teaspoonful of soda, a teaspoonful of cinnamon, a half teaspoonful of cloves, a half cupful of raisins, and three-fourths of a cupful each of barley and wheat flour. One beaten egg, all well mixed and baked in a moderate oven.

Corn Flour Chocolate Cake.—Take two ounces of grated chocolate, one-fourth of a cupful of shortening, one-half a cupful of boiling water poured over the chocolate, a cupful of sugar, one egg, well beaten, a half cupful each of corn flour and wheat flour, a half teaspoonful of soda, mixed with one-fourth of a cupful of sour milk.

Rice Bread.—Cook a cupful of rice in boiling water until tender, using five to six cupfuls of boiling water. The age of the rice will make a difference in the time of cooking; rice that is two or three years old taking a longer time to cook. Add two tablespoonfuls of sweet fat, a tablespoonful of lard and a teaspoonful of salt to the hot rice, stir and cool; add a half cupful of home-made yeast or a yeast cake softened in three-fourths of a cupful of the rice water; add four cupfuls of flour, kneading it in gradually until it makes a very stiff dough, but the moisture in the rice will soften it so that when it rises it will be quite soft.

Handle the dough quickly, shaping it into loaves and when risen bake (in three loaves) for about three-quarters of an hour.

He is happiest who hath power To gather wisdom from every flower, And wake his heart in every hour To pleasant gratitude. —Wordsworth.

### WHAT TO HAVE FOR DINNER.

With the food problems of the present day, a housekeeper must not only be a good manager but a mathematician. It is necessary to have no waste, that careful preparation for each meal be made. Surprise Biscuit.—Prepare baking powder biscuit as usual with the exception of wheat flour; substitute corn flour, potato or barley. Roll the biscuit rather thin and place a spoonful of chopped seasoned meat on one, cover with another, bake until well done and serve with a brown gravy poured over each. This makes a good main dish, which will use up leftover meats.

Add a cupful of stoned chopped dates to a loaf of bread when ready for the pan.

Date Tapioca.—Cook in a double boiler, stirring frequently, three tablespoonfuls of tapioca, three pints of milk and three-fourths of a cupful of maple syrup. When cool stir in a cupful of chopped dates, a teaspoonful of lemon juice, then bake in a well buttered baking dish.

East Indian Meat.—Put a pound and a half of round steak through a meat grinder, also one green pepper and onion, a cupful of bread crumbs and salt and pepper to taste. Mix well and make into a loaf. Lay in the baking pan with slices of bacon over the top, pour over a can of tomatoes and bake one and one-quarter hours. Remove the meat and thicken the sauce. Serve either hot or cold.

When Bret Harte wrote "The Luck of Roaring Camp" the young woman who read proof for the Overland Monthly, the paper for which it was written, sent word to him that if anything so indecent was to appear in the paper she would resign. The wife of the owner of the magazine also felt that it was somewhat risqué. Harte was utterly unable to find anything improper in the story and delivered his ultimatum in opposition to that of the proofreader. If the story was not published he would resign. The story appeared, but did not meet with favor on the part of Californians. However, it was a great success in the East and a Boston publishing house offered to accept anything the author might send at his own terms.

### Nellie Maxwell

### Did She Resign?