Bacon curing on the farm

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UNTIL speedier transportation and the extension of refrigeration to country areas made it possible to use greater quantities of the factory-cured product, home-cured bacon was an important item of the farm dietary in many countries, and the killing of the pigs and the curing of bacon for home use was an annual event of some prominence in the farming calendar. Even today, the Department of Agriculture receives many requests for advice on bacon-curing on the farm, as a few well-cured hams and sides provide a reserve of tasty, quickly-prepared meals and an insurance against embarrassment when a number of unexpected guests have to be fed at short notice.

Low temperatures—preferably not higher than 60° F.—are almost essential to success in curing bacon under ordinary farm conditions so the best months are between June and September in most West Australian farming areas.

THE IDEAL PIG

The best pig for conversion into home-cured bacon is a young “barrow” or castrated male with a liveweight of about 180 lb. which should dress about 120 to 130 lb. If female pigs are used they should not be killed if they are approaching, or have recently passed through the oestrus or heat period. At least ten days should elapse after the conclusion of the heat period, otherwise the meat will not keep well.

The long lean type of pig should be chosen, in preference to the short chunky animal which usually carries an excess of fat. For three weeks before killing, the pig should be “topped up” on hard grain, and slop-feeding entirely discontinued.

SLAUGHTERING

Because fear, pain, anger or excitement all affect the keeping qualities of the flesh, the pig should not be driven or yarded immediately prior to slaughter. It is a good idea to have the scalding vat, scraping table and other equipment near the pen in which the pig is kept, or alternatively, the pig should be moved into a convenient pen some time before the day selected for killing.

Food should be withheld for 24 to 36 hours before slaughter but clean drinking water should always be available.

Before slaughtering, have ample supplies of hot water ready for the scalding. An open 100 gal. tank makes a good scalding vat and the water should be at a temperature of 140 to 160° F. A “rule-of-thumb” method often used is to have two measures of boiling water to one of cold. A low bench or two suitably-sized packing cases placed together and covered with old cornsacks will make a good scraping table.

Have all the other equipment ready—a good sticking-knife with an 8 in. blade preferably sharpened at both sides of the point, scraping knives or pig-scraping tools and two or three sharp-pointed S-hooks to facilitate handling the pig. Bag-hooks will serve as substitutes if butchers hooks are not available.
It is advisable to stun the pig before sticking it. A smart blow on the forehead with a hammer or the back of an axe is usually recommended but most people will find it easier to shoot the animal. A .22 rifle using a long rifle cartridge will be effective on a 180 lb. pig and the bullet should enter the middle of the forehead about three-quarters of an inch above the eyes. In the case of larger pigs, which often develop heavy frontal bones, a more powerful weapon may be needed or the aim should be taken from the side with the bullet entering behind the ear.

As soon as the pig drops, it should be stuck and bled. If suitable gear is available it can be hung head downward by a hind leg before sticking, but otherwise it should be rolled on its back and held in position by an assistant who stands astride the pig, holding the forelegs.

The operator then stands directly in front of the pig, presses the snout downward and opens up the throat for about three inches in line with and in front of the breastbone. The knife is forced in for about five or six inches towards the tail and in line with the backbone. A twist of the wrist will sever the large blood-vessels at either side of the wind-pipe and the blood should flow freely. The knife must be inserted centrally so as not to damage the shoulders.

The aim should be to drain as much blood as possible from the carcass. Do not try to stick the heart, which should be allowed to continue to pump out blood as long as possible. Do not attempt to check the muscular spasms and struggling which take place after sticking as these help to maintain a free flow of blood. It is an advantage to have the pig on a sloping surface with the head downward to facilitate thorough bleeding.

SCALDING AND DE-HAIRING

As soon as the pig is dead, insert a hook through the snout or the lower jaw and others between the ligaments and the bones of the hind legs. These will facilitate the handling of the carcass in the scalding vat. Draw a sharp knife down the backs of the legs between the hocks and fetlocks, making two parallel cuts about half an inch apart so that the hooks—and later the gambrel points—may be inserted under the strong suspensory ligament.

A good “bush method” of testing the temperature of the water in the scalding vat is to cut off the pig’s ear and immerse it in the water. As soon as the outer skin and hair of the ear slip off freely, immerse the carcass and keep it moving in the hot water so that all parts are evenly scalded.

Lift on to the scraping table and lose no time in cleaning the head and feet which are the most difficult portions. The horny coverings of hooves and dew-claws may be removed off by inserting a hook just above them and giving a firm pull.

Various types of pig-scraping tools are available but ordinary knives or strips of sharpened hoop-iron will be found quite effective.

Keep a dipper handy and make frequent applications of hot water to the carcass if the hair and skin fail to come away easily.

Finally, go over the carcass with a really sharp knife to shave off any hairs missed in the scalding and wash the carcass thoroughly with cold water.

DRESSING

Insert the gambrel in the hind legs and hoist the carcass to a convenient height. Stand behind the pig and grasp the tail, then with a sharp knife cut around the pelvic arch to free the back passage, from the surrounding tissues.

Move to the front of the carcass and split the skin between the hind legs, then continue the cut—through the skin only—right down the centre of the belly to the throat.

Cut into the bone between the hind legs then open the abdominal cavity by following the initial shallow cut. Insert two fingers of the left hand and cut downwards between them so as not to puncture the bladder and intestines. Keep the
knife pointing downward and continue the cut through the breastbone to the lower back passage, etc., which may then be bladder and use the knife to free the jaw.

Grasp the intestines just below the drawn through the pelvic arch and allowed to fall forward and downward, exposing the kidneys and kidney fat attached to the backbone. Leave these in position but make a cross-cut to the backbone under the kidneys and then make a circular cut round the diaphragm (the partition separating the chest from the abdomen).

The whole of the entrails—intestines, liver, spleen, stomach, heart and lungs—may now be pulled forward out of the carcass and the windpipe and gullet may be cut free and severed at the root of the tongue.

Insert a wooden spreader to allow free air circulation and wipe the carcass thoroughly inside and out after washing with clean cold water. Put a small block of wood between the teeth to allow drainage from the head and hang overnight or until the meat is firm and “set,” being careful to protect the carcass from dust and flies.

**CUTTING UP**

When the carcass is firm, remove the head by cutting into the bone all round the neck about half an inch behind the ears. If an assistant holds the forelegs the head can then be “screwed off” the spinal column. The trotters are removed and the knife is then used to make a deep cut down the centre of the back. Saw down the centre of the backbone so that the carcass is divided into two “sides.”

Lay each side flat on a table with the ribs upward and remove the “leaf lard,” kidneys, and kidney fat.

The amateur bacon-curer would be well advised to remove the backbone and ribs to facilitate curing. These, with the strip of lean meat under the loin, may be roasted and will yield tasty pickings. “Spare-ribs and griskin” was always a popular meal at “pig-killings” on English farms.

The side is best cured in three or more pieces as indicated in the diagram. Cut through between the third and fourth, or fourth and fifth, ribs to separate the shoulder, and cut off the ham by a slightly curved incision and by sawing through the aitch-bone. The piece of aitch-bone remaining in the ham should be removed before curing, so as to expose the rounded head of the thigh-bone.

The shoulder may be cured in either one or two pieces, but owing to the thickness of flesh and the wealth of bone in this portion it is difficult to cure properly without a brine-pump and the beginner would be well advised to utilise this part of the animal as fresh or pickled pork.

The cheeks may be removed from the head and are best used as pickled pork, or the whole head may be split and cleaned and used for making brawn.

Before commencing to cure the main portions all pieces should be neatly trimmed and the joints of the hams and shoulders should be punctured with a sharp-pointed knife to release the synovial fluid (“joint oil”). The cavities should be well washed out with brine.

**THE MORDANT**

When the various pieces are trimmed and ready for curing they should be well
sprinkled with a mixture of equal parts of salt and finely-powdered saltpetre which is allowed to remain on for about 24 hours. This mixture fixes the colour of the lean meat and prevents it from becoming grey and unsightly. Brush or wash off the mordant as it is called and our bacon is ready for the actual curing. Some people prefer to dry-cure the bacon while others prefer immersing it in a liquid pickle.

**PICKLING**

A good pickle-tub is always useful on a farm as it may be used for corning beef or mutton when not required for bacon-curing. The vessel should be non-metallic, and a large cask or a water-tight wooden trough would be ideal. Concrete troughs are also widely used.

Even where a liquid pickle is used it is usual to dry-salt the meat before placing it in the pickle. The pieces are well rubbed with salt and stacked to drain, the process being repeated daily for three days.

The temperature of the pickling room should be kept low, round about 45 to 50 deg. where possible, but as farmers have little opportunity to regulate the temperature, any cool portion of the house must suffice. For this reason, successful farm curing may only be carried out during the winter months. Where a cellar is available, almost the ideal conditions are at hand, for the curing room should be cool, moist and dark.

There are hundreds of varying recipes for pickle but this one is usually regarded as more or less “standard.” The quantities of sugar and saltpetre may be varied according to individual tastes.

Where obtainable, a brine pump in the hands of an experienced user will speed up the curing of the thicker portions of the meat where decomposition is liable to occur, but if the temperature of the pickle is kept low, it is usually possible to cure satisfactorily by immersion. Here is the recipe:

Clean rain water, 20 gallons; fine dairy salt, 50 lb.; brown sugar, 5 lb.; saltpetre (powdered), 2 lb. Mix well. This is sufficient for 500 lb. of meat. Dissolve the salt, sugar and saltpetre in the water, and immerse the all-spice, tied up in a calico bag. Boil for one hour and skim off any frothy matter rising to the surface while boiling. Allow the solution to come down to the temperature of the curing room before placing in the pickling tub.

As mentioned earlier the pieces should be rubbed with salt for three days before being immersed in the pickle. If it is necessary to place weights on the sides in order to keep them immersed, see that clean pieces of hardwood are used, and soak them well in waste pickle before use. Change the position of the pieces every three or four days. The time the meat is in pickle will be determined by the size of the sides, but it is usually three weeks. Hams usually require another week.

**DRY CURING**

This recipe has given good results: Fine dairy salt, 50 lb.; brown sugar, 5 lb.; saltpetre (powdered), 2 lb. Mix well.

For the first three or four days after the mordant has been applied and removed, this mixture should be rubbed in over the fleshy parts and round the bones and joints. Afterwards spread it freely over the sides, say twice a week, allowing more salt, etc., on the hams and shoulders, less along the back, and least of all on the bellies.

Stack the sides, flesh side up, one on top of the other, in such a position that as the salt dissolves it will run towards the thicker portions of the side and to the ham and shoulder. Alternate the stacking so that the pieces on the top one day will be at the bottom the following day and so on. About 14 to 21 days are required in the stack, according to the size of the sides.

**WASHING**

At the conclusion of the dry-salting or pickling process the meat is removed from the curing stack or vat and prepared for the final processes. Drop each piece of dry-salted meat separately on a table or bench, so as to knock out any free salt that may be left on the side. Any loose pieces of fat or flesh may also be cut off, and the meat then placed in a vat of cold
water in which baking or washing soda has been dissolved in the proportion of 1 lb. to every 20 gallons of water. This solution removes excessive saltiness and makes the curing milder. Allow the meat to remain in the solution, flesh side down, for 24 hours; then remove and wash well in a bath of lukewarm water.

The next process is to hang the meat in a cool, airy room to dry off as much surplus moisture as possible.

**SMOKING**

The smoking of bacon gives the meat a delicate and appetising flavour and the process also assists in preserving the flesh by coagulating the albumen near the surface, thus forming a protective envelope. The smoke also deposits substances which check the action and growth of putrefactive organisms.

When the pieces of bacon have dried out (not before) they should be placed in a smoke-house and exposed to dense volumes of smoke at the lowest possible temperature.

The smoke-house should be tall so that the bacon hangs well away from the fire. It should be dark, and roomy enough for the bacon pieces to hang without touching one another so that the smoke can reach every portion.

An old galvanised iron tank may be converted into a serviceable smoke-house and many farmers used temporary structures with old superbags nailed on to timber frameworks. To lessen the fire risk it is advisable to treat the bags with a cement wash after nailing them in position.

In a brick or iron structure, the source of the smoke can be a fire in a tray or brazier inside the building, but a better method is to dig a hole about six or eight feet away with a trench to carry the smoke to the house. A sheet of galvanised iron is laid over the trench and earth heaped over to make it smoke-proof.

A few glowing coals or some mallee-roots are placed in the hole and some sawdust, damp chaff, or twigs and leaves will produce dense smoke. The fire-hole is covered with a sheet of iron which can be raised by a stone or stick to allow sufficient air to enter to keep the fire burning slowly.

The time required for the smoking process will depend upon the material...
used and the taste of the consumer. Where a dense volume of cool smoke is maintained, about 24 hours or even less will suffice, but two or three days is usually needed in ordinary farm practice.

After the meat has cooled off thoroughly, its appearance will be greatly enhanced if it is rubbed over with pure olive oil.

Smoked bacon will hang well in the smoke-house until required, provided reasonable care be taken to exclude insects and to keep the place very dry, dark and cool.

PACKING AND STORING
Where it is proposed to pack the bacon or hams, in order to prevent attacks by insects or other troubles, the flesh may be rolled in bran, or wrapped in clean white packing paper, and stored away on shelves or in boxes.

Every effort should be made to prevent blow-flies and other pests from gaining access to the meat, for they leave their eggs on the flesh and in its numerous interstices; and later on these give endless trouble. A simple means of checking their depredations is to sprinkle the surface of the meat with black pepper, or a mixture containing this and cayenne pepper. Another effective plan is to saturate calico, hessian, or clean bagging in a creamy mixture of lime and water, and wrap it round the ham or bacon after it has been rolled in oatmeal or bran. Stitch the covering closely round the flesh, and hang in a cool place till required.

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