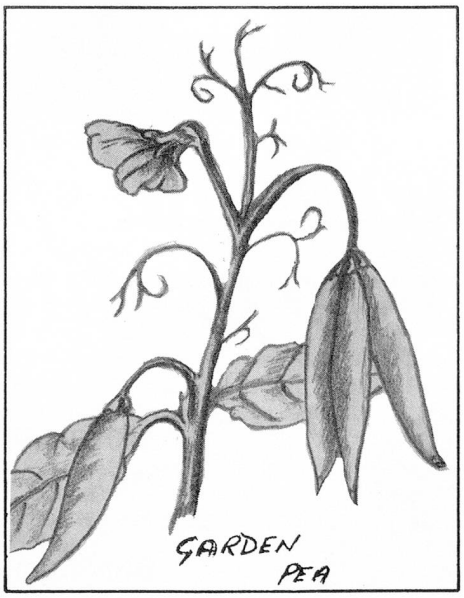
areas sowings may be made in the latter part of February, though generally early March would be soon enough.

The ground which has been prepared should be lightly forked over and drills 4" to 6" deep should be taken out along the full length. The peas should then be spaced out along these drills about 3" apart and in three or four rows. The drills should then be filled to a depth of about 2" with the soil removed when making the drills. This leaves the soil below the surrounding ground and acts as protection against any cold winds as the seedlings emerge. When the latter are some 3" to 4" in height, the staking should be inserted, twiggy hazel branches are best if obtainable, or netting can be used.

Successional sowings should be made as the seedlings emerge from the previous sowing.



HOW TO BAKE YOUR OWN BREAD

Although the crisis in regard to bread will probably by now have been settled, it is thought perhaps some of our readers might like to have first-hand knowledge passed on to them as to how to make and bake their own "staff of life."

The main thing to remember is that nothing should be hurried and each stage should be given time to fully develop, a lot depends on gas pressures at the time (that is of course if one uses gas for cooking).

INGREDIENTS & EQUIPMENT

Kitchen scales
One pallette knife
One measuring jug
Two 2lb oblong baking tins 4" sides
One large and one smaller mixing bowl
3lb of strong wholemeal flour, for brown bread;
or
3lb strong white flour, for white bread. (If you cannot get this, ordinary plain flour can be used, the finished product is not quite the same texture, but quite nice.)
One 4oz tin of dried yeast (this will be sufficient for at least 4 bakings, 8 loaves. If you only want to try one loaf, just halve the ingredients).

METHOD

Light the oven and keep on just warm.

Measure out by weight 1oz of the yeast and mix into 15oz of hand-hot water. It's best to sprinkle in gradually then one does not get the yeast clogging into one mass.

Add 1oz of granulated sugar and stir till dissolved.

Add three pinches of salt and stir in.

Place the mixture into the warm oven and leave.

Whilst waiting place 3lb of flour (one of the above) into the large mixing bowl, place into the oven for a few minutes to get warm.

Remove and then rub in gently 2oz of fat (I find that lard is best for this). Most recipes say use 1oz of fat but I have found that the bread tends to go a trifle dry rather quickly and the 2oz seems to have got over this problem.

Have a look at the yeast mixture in the oven, if it's got a nice frothy top on it, it is ready for the next step. If it hasn't, don't worry, put it back and leave until it does produce its head.

Divide the flour into two roughly equal amounts and place one half into the reserve bowl.

When yeast is ready, make a hole in the flour in the large bowl and tip the mixture in, get another 15oz of hand-hot water and add this as well. Thoroughly mix together into a smooth paste.

Obtain a cloth and place over the bowl and put into the warm oven and leave for about 15 minutes. Here again, it might take somewhat longer, the main thing is that the mixture should have swelled up to approximately twice its size, it's then ready to come out.

Mix in the remainder of the flour from the other bowl, this is quite a job and whilst most of the experts say use your hands, I find that it can be done quite successfully with the pallette knife. You should finish up with a nice ball of dough, if you find it's inclined to be very dry add a little more water, not too much, or you will have trouble later on in the process.

Replace in the warm oven, covering

very closely. Another approximately 15 minutes is required (I find that brown takes longer to rise than the white), the dough, when ready, should have expanded again to about twice its original size.

Whilst waiting, grease the baking tins and lightly flour them to prevent the bread sticking.

When the dough is ready, take out of the oven and tip the lot on to a floured surface, don't be frightened to use plenty of flour whilst kneading, as until it is ready the dough is pretty sticky.

The ball of dough must now be kneaded for 10 or 15 minutes, really give it a good pummelling, bang it, stretch it, fold it in and work with the ball of the hand pushing and opening up the dough.

Now divide the dough into approximately equal halves and shape by patting and smoothing, place each half into each of the baking tins, cover closely with cloths and put back into the warm oven, and leave again for some 15 minutes, when the dough will rise to above the edge of the tin. Remove the cloths cut across the top of each loaf with a knife, three times, put back into the oven and turn the the regulo to 7½ for gas. The tins should be placed on the middle shelf of the oven. Shut the oven door and leave alone for at least 30 minutes.

A lovely smell will eventually come from the oven and you will know that everything is going nicely. At the end of the 30 minutes gently open the oven door and you should find the loaves, or at least the tops of the loaves, a nice crisp brown. Take out of the oven but leave the gas on at regulo 7½, remove the loaves gently. You will probably find that the lower parts are a bit pale and soft so put back into the oven upside down and leave for ten minutes or so when the loaves should be brown all over.

Turn the gas off, remove the loaves and leave to cool on a wire tray. If you lift your loaves and tap the bottoms they should sound hollow.

The writer has had great success using the above method over the period of about 18 months, so if you do try it he would be pleased to hear how you have got on.

H. J. T.

ZOOTECHNY YESTERDAY AND TODAY

Extract from an article by
Prof. E. M. Lang,
Director of Basle Zoo

Every Swiss is familiar with the bear-pit in Berne, the history of which reaches back into the Middle Ages. The large number of cubs raised there seems to suggest that the bears feel at home, for it is well known that animals will not breed in captivity when conditions are unfavourable. The bear-pit at Berne is spacious, and these big beasts of prey show every sign of being at their ease. Yet it is known that their habitat has hardly changed since the Middle Ages.

Schaffhausen offers another example of the zootechnic methods of the past. The town moat, near the Munot tower accommodates a herd of deer that have adequate living-space and breed regularly.

The custom of enclosing animals in moats or pits is not without its drawbacks, especially from the point of view of the observer, who sees the animals from above and cannot discern their real proportions. The glance falls on their backs and reveals neither their silhouettes nor their size. But in the past man regarded animals only as goods and chattels, as things belonging to him. He did not think of approaching them on an equal footing, he "looked down" on them.

However, kings and emperors kept wild animals at their courts, for instance at Schoenbrunn Castle near Vienna and at Paris. It was only about the middle of the last century that the idea of showing them to the common people made any headway. By that time man was already beginning to feel the need for closer contact with nature. The parks in his towns were no longer felt to be sufficient. People wanted to see the animals living, and in order to be able to observe them under the best possible conditions, zoological gardens were opened near the big population centres.

Not much thought was given at that time to the physiological needs of the animals. The big species were shut up behind strong bars, where they had too little space. A lion had to be satisfied with 10 to 20 square yards, an elephant with about 80, surrounded by thick iron bars through which at least he could stretch his trunk to beg food from the public. The habits and requirements of the inmates were only vaguely known. Many animals were isolated in order to satisfy the curiosity of visitors, who wanted to examine them at close quarters. All that was done was to obtain from the wild the number of individuals that were strictly necessary for stocking the zoo. Nobody at that time thought of the possibility of the various species being threatened by extinction. It was an easy matter to replace animals that died; specialised enterprises were always ready to oblige.

The food for the animals was provided by other gardens. Carnivors were given the meat of oxen and horses that had died or had been slaughtered for the purpose. Ruminants and elephants were fed like cattle on the farm. The monkeys got human food of inferior quality. Consequently the big anthropoids received occasional beer and sausages in addition to bread, milk and fruit. The results were understandably disappointing. Nothing at all was known about essential amino-acids, vitamins and mineral salts. In addition, the food given to the animals was low in proteins.

Early this century a veritable revolution, initiated by the Hagenbeck zoos, began to transform zoological gardens. People realised all of a sudden that they had neglected an essential factor: the environment. Fences and bars were now replaced by trenches or moats. In an attempt to reconstruct the original habitat, zebras, ostriches and gnus were brought together in enclosures that copied the African steppe, while nilgais, reduncas and bantengs were placed in a landscape modelled on the Indian savannah.

The endeavour today is to raise solid-hoofed and cloven-hoofed animals in appropriate enclosures, so that each species can live on its own in groups or in families and can therefore breed. No further use is made of the platforms on which animals were once exposed to the view of the public on all sides and were consequently uncomfortable. Animals need spaces in which they feel safe: they suffer from the constant presence of other species and particularly of visitors.

The age of the caged animal is past. Since space is rather limited at Basle Zoo, we have constructed airy and spacious shelters enclosed by light metal netting which enable the animals to enjoy the sun and air and even rain and snow. The tigers bathe even in winter, and the lions climb their tree every day.

For monkeys and anthropoids we have constructed polygonal, air-conditioned spaces with several different levels in which they can use their climbing skills but are isolated from the public by glass walls. A large plant enclosure improves climatic conditions and furnishes a natural space behind the shelters. Formerly shut up in rectangular cages, the anthropoid apes crouched at the foot of the walls and swayed sadly back and forth in the grips of a veritable neurosis. Today they live in families – the gorillas have already reached the second generation – and therefore have more diversion. They are also given things to play with which, together with the meals, break the monotony of the day.