#### SOURDOUGH BREAD AND FOCACCIA: Too Difficult for a Ship's Cook? Tim Bridgen

(Tim has long been a contributor to the From the Galley of... series, for which I still welcome your seagoing recipes. Running a recipe at article-length will remain very much the exception however, so please don't get carried away!)

Sourdough making is a perfect process for passagemaking as it needs several short periods of attention over 24 hours and lends itself to repetition on a daily cycle. It's all about keeping your sourdough 'starter' fit and well with daily 'feeding', and giving each day's dough batch up to 20 hours of sitting about to develop its delicious taste and elasticity. You don't need worktop space to knead it, which cuts down on floury mess around the galley.

First you'll need the 'starter'. This is what produces the flavour and rise in sourdough bread, rather than the dried commercial yeast you buy in the supermarket. There are four ways to get one - (i) buy it off the web for about £15, (ii) ask your local traditional bakery for some of theirs, (iii) ask a friend who bakes for some of theirs, or (iv) grow your own. I've done all four.

This is how to grow and keep your own:

- ✓ Mix 2 cups of wholemeal flour with tepid water into a thick batter consistency in a lidded container that you have space to keep lying out in the galley or in your 'fridge for the long term. The wholemeal husks in the flour will be covered in wild yeasts, so don't worry about the ocean air being fungus-free if you start mid-passage. Your galley will have its own resident flora too, however clean you keep it!
- ✓ Put the lid on but without making an airtight seal. Open and stir it twice a day. Try to keep it between 15–30°C. If the temperature is below 15°C the growing process will slow down or stop. If it's over 25°C it may produce too much acidic liquid, which isn't dangerous but will stop the good yeasts from growing and doesn't taste nice.
- ✓ On the third day, add a cup of plain white flour and enough tepid water to bring it back to a thick batter. Cover and leave for another two days, stirring twice a day.
- ✓ By day five it should have a very little dark liquid on the top and smell quite beery and lightly of nail varnish (yum!). If it also has plenty of small bubbles in it, you've bred a starter. Otherwise, throw it away and start again.
- ✓ If it's as described, pour half away, add a cup of white flour and enough tepid water to bring it back to a thick batter.
- ✓ On day six, repeat day five's process.
- ✓ By day seven it's ready to use!
- ✓ On a day that you make bread you'll remove half the starter and replace it with a cup of flour and enough water to bring it back to a batter. On days you don't use it,

carry out the same feed process if you're going to bake the next day. Otherwise put it in the fridge, or be prepared to feed it at least every other day. It's a mixture of wild yeasts and lactobacillus (the organism that sours milk and makes cheese) and it needs flour to feed on and fresh water to dilute the by-products of the breeding process and

to keep the flavour just right. Heat speeds everything up but can produce excess acid flavour; the cold of a fridge will slow it to a crawl.

Here's mine, four hours after a feed and eight hours after coming out of the fridge. It's ready to make sourdough with.

So here's how. The recipe is extremely simple – success depends on managing the dough's life over the next 24 hours! Stir 100gm of starter into 350ml of



tepid water in a mixing bowl. Add 450gm of very strong white bread flour and 50gm of wholemeal flour. Stir until it begins to pull together as a dough, then work it briefly with your hands into a loose ball. It will look like this:



## The ball of dough resting before adding salted water

Cover with a tea towel and leave for about 20 minutes for the water to fully hydrate the flour. Dissolve 10gm of table salt in 25ml of tepid water and work it well into the dough using your hands. Then transfer the dough to a loose-lidded container with

enough space for the dough to more than double in volume, and preferably translucent so that you can see the bubbles develop (a 2 litre ice-cream tub is ideal). This is the bulk rise process.

Pull one side of the dough up and out of the container and fold it back down. Do this on each of the four sides of the dough twice, like this:



Fit the lid loosely (to allow the gas produced to escape) and leave somewhere that's between 15° and 25°C. Repeat the stretch and fold process three or four times over the next 12 to 18 hours until it looks like this:

The alien-looking bubble is slightly unusual in size – the other smaller ones on the surface are more usual!



It may take longer than 18 hours, in which case give it more time. If it takes less than 12 hours to get this size, put it somewhere cooler and leave it for a total of at least 15 hours. The dough must have enough time to work with the starter for it to become strong and elastic enough to support itself during baking.

To make a traditional farmhouse loaf – which is probably why you wanted to use sourdough in the first place – the final treatment of the dough is critical. You are looking to create folded layers inside the loaf with a smooth stretched surface. This is so the loaf keeps its shape while it rises in the oven.

First, gently work the dough out of the container onto an unfloured surface and let it rest for about 20 minutes. It will spread slightly but should remain thick with a curled, rounded edge. If it spreads into more of a pancake shape with the edges flattening out, the dough hasn't developed enough and you should return it to the container for another few hours. Then dust the top of the dough with flour and loosen it from the surface, working round it with a cupped hand and a dough cutter. This will make the dough circular and reduce its circumference. Here's how it should look:





Flip it over so that it's floured surface down, sticky side up. Take one edge in your hand, stretch it out to at least double its length and fold it two thirds of the way back – like this:

This will make it roughly oblong. Do the same on the other three sides, after which it will look like this:



Folding the first side ...

... and the other three ...

... to produce a slightly flattened sphere



Flip it back over, so that the folds are on the bottom and work around it with the dough cutter and a cupped hand. This is to stretch the surface until it's tight and smooth and the dough



becomes a slightly flattened sphere like this:

To increase the tension in the skin, cup your hands around the side of the ball furthest from you and pull it gently towards you so that the edge nearest you just catches on the work surface. Keep pulling until an inch or two of the skin has been pulled under the edge. Repeat this at least four times, turning the dough ball 90° each time.

It then needs flipping one last time before placing it gently, smooth side down, in a bowl to shape it during the final proving process. I use a traditional wicker bowl for this, but anything of a similar size and shape can be used. The inside of the bowl must be very heavily floured to allow the dough to drop out cleanly when ready, so, if using a metal

## The floured bowl of newly-folded dough

or ceramic bowl, you should line it with cloth to hold the flour in place. I like to use a mix of wholemeal and spelt flours for this to add taste and texture to the crust. Here's my floured bowl, holding newly-folded dough, folds uppermost:



Cover with a tea towel and leave somewhere warm for the final rise of three to six hours until it roughly doubles in size again and looks like this (below). Do not let it over-prove or it will collapse into a pancake when you turn it out. Doubling in size is a good estimate,

but after a few catastrophic mistakes you'll be able to tell the difference between a fully-proved, taut-but-elastic dough and a flabby, puffed-up over-proved dough.

# Fully risen and nearly ready to bake

Now to get ready for the bake. You'll need the oven to be as hot as you can get it – ideally 220°C. With a typical bottled-gas marine oven you struggle to achieve that, but turn it right up, let it pre-heat



thoroughly, and use the top shelf. To get the best crust you need steam in the oven for the first ten minutes of the bake, so once the oven is hot, put a deep baking tray on the oven floor and half fill it with boiling water.

Bake the dough on a shallow baking tray or, ideally, a pizza stone, which should be preheated in the oven. When all is hot, gently turn the dough out onto the stone fold-side down, sprinkle it lightly with a little water for extra steam, and cut a pattern of slits deep



enough to split the quite leathery skin which will have formed on the dough. A sharp galley knife will probably not cut cleanly enough – a razor blade or hobby knife works better. These slits are important to allow the loaf to rise and need to be substantial.

Sporting slits, it's ready to go in the oven

Quickly put the dough in the oven – the slits will tend to let the shape sag – and leave for ten minutes with the tray of water producing steam. Then remove the tray and continue baking for a further 20 minutes or so – until the crust has turned a rich, quite dark, brown. If in doubt, cook it longer – the thicker and crisper the crust the better! The classic test of doneness is when the loaf feels light and the bottom sounds hollow when tapped. However, if a sourdough crust is nice and dark, the inside will be cooked.



#### Et voilà!

After removing from the oven, resist the temptation to cut it open immediately. Leave it to cool for at least 20 minutes for the crust to crisp and to avoid the inside sticking to the knife when cutting. This is what you can expect!

#### Sourdough foccacia

Sourdough foccacia-making is rather easier – the elaborate folding and shaping for the final rise, and the steam baking for a good crust, are not necessary. It also keeps better and can include toppings to make it a meal in itself for a hungry crew coming off watch. Perfect!

The process is exactly the same up to the end of the first, bulk rise – other than using 500gm of very strong white flour without the wholemeal in the dough. The dough doesn't have to hold its shape so well, so focaccia is more forgiving of less-than-perfect dough development. The dough is turned out of the lidded container directly into a large, deep, baking tray with 2–3tbsp of high-quality olive oil in the bottom, then stretched and flattened out gently until it completely covers the bottom of the tray. Smear another 2–3tbsp of olive oil over the dough and fold one side halfway back on itself. Then fold the opposite side across to meet the other edge. Finish by folding the other two edges the same way to form an olive oil-filled parcel.

Turn the dough parcel over and spread it out again to fill the tray. Cover with a tea towel and leave somewhere warm for three to six hours until it's at least doubled in depth. Gently press a finger into the surface to produce dimples all over the dough, then splash about one tbsp of oil across it.

You're now ready to add the toppings. Olives, rosemary and sea salt are all very traditional, but all kinds of fresh or dried herbs, vegetables in oil (eg. sun-dried tomatoes, artichoke hearts and roasted peppers) are great, as are fresh and hard cheeses (eg.



A sourdough foccacia topped with cherry tomatoes, basil and Parmesan flakes

Parmesan), dried meats and sausages (eg. chorizo, parma ham etc), tuna or anchovies in oil – the list of things you'll have stored under the bunk which will make delicious toppings goes on and on. Just make sure they're liberally coated in olive oil.

Baking is again at 220°C or as hot as you can manage, but without the need for steam. It will take 20–30 minutes until the top is deep golden brown and the edges are crispy. This one is made with fresh cherry tomatoes, fresh basil and Parmesan flakes, but sun-dried tomatoes in oil and dried basil might well have given a stronger flavour!

And finally ... a few words on the only four ingredients in the entire sourdough process – flour, salt, water ... and time.

**Flour** – firstly, for the starter, actually any flour will do. The organisms that are needed to colonise it are everywhere and aren't fussy – wholemeal flour is just most likely to have the most of the right ones from day one. Secondly, don't increase the proportion of wholemeal in the bread beyond the 10% I specify here – it reduces its elasticity and makes the moulded dough more likely to collapse into a pancake.

**Salt** – we all know that too much salt is unhealthy, but you want to bake sourdough bread because of its flavour. Reducing the salt makes it tasteless, so if you can't tolerate the salt content, don't bake it!

Water – it's a trade-off. The more water you use, the better the potential rise and the bigger those lovely holes, but the more sticky, soft and difficult to manage the dough becomes. This recipe specifies 75% hydration – 500gm of flour to a total of 375ml of added water. That's on the slightly dry side of average, so on a long passage feel free to experiment with more water.

Time – if you are an experienced baker of 'normal' bread you will be used to getting started early in the morning in the tropics and having fresh bread to serve by lunchtime. For sourdough, the same is true – it's just that the lunchtime is on the next day! Don't try to rush it.