

# Scotland *The Bread*

home-grown bread for a healthy nation

## What is it?

Scotland The Bread is a collaboration to re-establish a Scottish flour and bread supply that is healthy, equitable, locally-controlled and sustainable. It links together plant breeders, farmers, millers, bakers, public health nutritionists and citizens. Our measure of success is how reliably we pass on nourishment, from the soil to the slice. To achieve that, we need to create change in every part of the system: fair prices for local farmers growing nourishing food for people, fewer damaging food miles, more nutrition in every slice of bread and more jobs per loaf as we skill up community bakers to bring out the best in our local grains.



## Why is it needed?

Very little Scottish wheat goes directly into Scottish bread. Farmers, locked into a commoditised system over which they have little control, need ever higher yields in order to survive. Plant breeders and agrichemical input suppliers dance to this tune, ignoring grain quality (from the perspective of the human consumer) as much as the biological limits to growth. Climate change (and the need to de-carbonise the food system), the volatility of global markets in the face of population growth and financial speculation, and the public cost of highly processed food based on a narrow selection of commoditised ingredients all suggest the urgent need for change – from the ground up.

What is needed is a grain supply chain designed for **resilience**, responsive to the imperatives of food justice and sovereignty and capable of feeding healthy citizens. To achieve these societal gains requires **research** to produce new plant varieties attuned to agro-ecological land management and the dietary needs of people, especially those with limited appetite and no say in what they eat. Community-scale **bakeries** will require more **skilful bakers** using long fermentation which brings the best out of local flour. New **distribution** systems and public **procurement** priorities will ensure equitable access to good bread for all.

## What will it do?

Combining research with action, Scotland The Bread collaborates with scientists in leading institutions using, for example, DNA-fingerprinting and gene sequencing to find traits in heritage Scottish and Nordic wheats that will inform a selection and breeding programme to produce locally resilient grains of high nutrient density and improved digestibility.

The project started on the ground in 2013, by bulking up samples of 19<sup>th</sup> century **Scottish wheats** on four organic farms. Initial testing at The James Hutton Institute revealed promising mineral densities. Three varieties (Rouge d'Ecosse, Goldendrop and Hunters) were grown on in 2014 and 2015. 10 tonnes of grain is now ready to be tested by bakers. Other gene bank accessions of Scottish origin, together with Nordic varieties that have been screened for mineral density, were planted in 2015. 2016 will see the first crosses between modern hybrids and high-mineral older cultivars. Evolutionary breeding, based on British and Nordic wheat populations and landraces, is also part of the project's agro-ecological approach. As new varieties and landraces emerge, we will define, with broad participation, new standards for the **nutritional density** and **digestibility** of Scottish breadmaking wheat, including the transmission of these characteristics through the milling and baking stages.

The experience of non-commodity growers and citizen participants helps secure the **democratic legitimacy** of the whole endeavour. Scotland The Bread is simultaneously developing a market for the new grains by building community capacity in small-to-medium scale artisan breadmaking.

Growing better grain and baking better bread can provide part of the solution to diet-related ill-health when it reaches everyone, including those with least access and choice in their daily diet; older people, children, those looked after and 'catered for', in our hospitals, schools, prisons and care homes.

*When we all know who it is in our locality who grows the grain, mills the flour and kneads the dough that becomes our daily bread, we will be better nourished – in every sense.*

## What next?

Scotland The Bread will launch as a non-profit **Community Benefit Society** in early summer **2016**. Membership will be open to everyone with an interest in improving the grains we grow and the bread we eat. If bringing home the bread sounds to you like a good idea, please support us and get involved. **Sign up** to the Bread Matters newsletter at [www.breadmatters.com](http://www.breadmatters.com) and we'll keep you informed.

## Contact

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### Project collaborators

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