



## Indigenous native flour

### Putting carbon back in the soil one slice at a time

As debate rages around a move towards net zero carbon and political contortions are being made to avoid any mention of a price on carbon, there's one way to accelerate sequestering carbon across the landscape that draws from 65,000 years of traditional knowledge managing Country.

Deep rooted native perennial grasses are well known [sequesters of soil carbon](#). They also form the [original Indigenous native grain system](#), a food source that has the potential to equitably [stimulate regional economies](#) and [build resilience back into our national landscape](#).

Importantly, and perhaps ironically, the roadmap for developing the native grains sector can take inspiration (or a slice) out of the fossil fuel industry's [approach to decarbonising Australia](#).

Why the reference of fossil fuel industry when we're talking about sequestering carbon? Most Australians recognise E10: a locally produced biofuel that combines petrol with 10% ethanol. E10 was introduced to help decarbonise the transport sector ([with debated results](#)), but advocates would argue it also delivers broader socioeconomic and environmental benefits (albeit biofuels also always attract a [food vs fuel debate](#) around land use).

The point is: to support the ethanol industry in Australia, the Federal Government created the [Ethanol Production Grants Program](#) (EPGP) to accelerate early production and deployment of ethanol as an alternative transport fuel. The program ended in 2015 after pumping \$839 million of funding into the sector. So, keep the case study of E10 in mind for the next section.

Now to the Indigenous native grain system and an industry path towards Indigenous native flour.

In 1974, [Norman Tindale](#), an ethnologist with the South Australian Museum and who benefited immensely from the tutelage of Maroadunei, a Ngandi songmaker from Arnhem Land, delivered an important piece entitled "[Aboriginal tribes of Australia: their terrain, environmental controls, distribution, limits, and proper names](#)".

In this book, Tindale described a large area of Australia, referred to as [Panara](#) or 'Tindale's Arc'. Spanning the continent from west to east, [Tindale's Arc suggests locations of](#) native grain systems based on the commonplace of grinding stones among Indigenous communities (pre-colonisation). Tindale sketched a map to



illustrate the area where native grains (i.e. grass seeds from perennial grasses) were likely used as a regular source of food (Figure 1).



Fig. 31. Grassland areas exploited by aborigines as important sources of grain food with some of the names of tribes.

Figure 1 – Tindale's Arc

Since Tindale's 1974 publication, researchers have identified [significantly more and widespread use](#) of native grains by Indigenous peoples. For [thousands of years, prior to colonisation](#), Australia's perennial grass systems worked as a [sustainable grain system](#) – our original Indigenous Native Grain belt.

One mechanism to mobilising investment in the resurrection of Australia's original grain belt exists in the E10 story. If Australia established a flour standard containing 5% native grain – **F5** – it would offer a framework to channel investment to re-establish native perennial grasses across the landscape and facilitate the normalisation of Indigenous traditional food systems in our daily life.

Like the E10 initiative, **F5** would deliver [significant carbon outcomes through improvement to soil carbon levels](#) across the national "farmscape". Deep-rooted native perennial grasses have been long known to increase soil carbon. Importantly, revenue from Indigenous native grains means planting perennial native grasses does not rely on creating carbon credits from soil carbon to offset costs given [current limitations identified in measuring and trading carbon credits](#).

For farmers integrating native grasses into their operation, they are including Indigenous native grains as a food product revenue source and improving the value of their land asset, especially if native grasses are planted across the marginal parcels of the property too degraded to yield any existing non-traditional crops.



There is a growing Indigenous Native Grain initiative across Australia which is seeking to reconnect culture, country, language and traditional foods. Central to the Indigenous Native Grain initiative is the acknowledgement of Indigenous peoples playing the leading role in their native grain story and the invitation to non-Indigenous farmers to join the effort. Unlike the current paradigm of only [1% revenue from the sale of traditional foods](#), the Indigenous Native Grain initiative ensures Indigenous peoples participate equitably in the economic returns from their 65,000 years old food story.

While there is a need for further research across the whole spectrum of the Indigenous Native Grain sector, from soil science and nutritional analysis, to farm technology development, early signs (and thousands of years of history) suggest we're on a winner. At 5%, the impact on our collective palate is minimal, yet the [micronutrient benefits](#) could be substantial and with each slice of F5 bread, we would be funding carbon sequestration, with innumerable natural, social, cultural benefits.

However, beyond the science, what **F5** offers is the chance for the nation to come together in a '[culinary reconciliation](#)', to celebrate and embrace Indigenous food history – to break bread and share stories that are steeped in 65,000 years of connection to Country.

### **About Black Duck Foods Ltd**

An Indigenous social enterprise committed to traditional food growing processes that care for Country and return economic benefits directly to Indigenous people. Contact: [info@blackduckfoods.org](mailto:info@blackduckfoods.org)

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