Regenerative farmers: Matt Long

Long Farm is on Kaiatea Road just a few kilometres from the east coast and Matapouri. Half of the farm has been in the family since the 1960s with the other half purchased in 2003. The bulk of the 240 hectares of the farm is on rolling hill country. There are 210 hectares effective grazing, with the remainder in bush. Matt and Rachel live on the farm with their two children and Matt’s mum and dad are stone’s throw away in a neighbouring house.

Matt milks once a day year-round, calving half the herd in Autumn and half in Spring. He has considered seeking organic certification, but the requirement to use non-tanilised fence posts has dissuaded him. He also prefers to buy in replacement stock. Matt classifies himself as a regenerative farmer. Not pursuing certification standards enables him to focus his attention where it is needed in continually improving the farm.

Figure one: Matt at Long Farm

Soil and pasture

Pasture management takes a lot of Matt’s attention. He used to re-sow with ryegrass mixes after cropping with turnips to eradicate kikuyu, but kikuyu protects the soil. When kikuyu was sprayed out (before Matt started managing regeneratively) the exposed land was seriously eroded coming out of the turnips when every four or five years a cyclone would happen.

It is hard to both establish a new pasture species and to sustain it. Matt strategy is to let the pasture evolve supported by pasture management to encourage diversity. Kikuyu and clover are dominant in the warmer months, and pastures are grazed hard or mowed to allow other species come through in late autumn through to spring. Matt attempted, unsuccessfully, to sow “tonic” plantain species but it was
prone to insect damage. The “native” plantain in a regenerative pasture (no longer sprayed with Dock) also adds diversity to their diet. As Dr Ardern Anderson said, “if you have a weed growing in the wrong place you it doesn’t show you have an herbicide deficiency”.

Matt was first inspired to adopt regenerative agriculture when he attended a presentation by Dr Ardern Anderson, hosted by eCogent. He has maintained a working relationship with eCogent’s Peter Floyd. Since 2009, eCogent have tested Matt’s soils probing to 750 mm. They would ideally test to one metre, but that is difficult on most Northland soils. He is following the Albrecht system that targets a 5% soil organic matter. Results have been encouraging but variable.

![Image of Duncan Johnston with soil sampling equipment](image)

*Figure two: Duncan Johnston with a soil core extracted with his sampling equipment*

Matt remains passionate about the efficacy of soil carbon for not only improving soil, plant and animal health, but also offering a powerful solution for climate change via soil carbon sequestration. Here is an extract from a paper Matt wrote about soil carbon.

> My first glimpse of the possibilities for soil carbon was at a King Country lamb finishing operation more than ten years ago, this farm had changed its fertiliser program to a more soil
friendly approach and the results were impressive. The first soil horizon, normally called topsoil, was still clearly visible, however the boundary of the layer instead of being sharply defined was broken up, and below for a distance of more than one and a half times the depth of the topsoil the subsoil had taken on the appearance of lighter top soil.

This and the trial work that we have done since rebuts the argument that our soils are “saturated with carbon.” It is only possible to make this argument if we pretend that our soils are only 75 mm deep. You will note that the probe on the first page is a metre deep and indications are that carbon is being pushed deeper than this. Anyone measuring soil carbon at less than a bare minimum of 300mm cannot be taken seriously.

Matt sees visible evidence of increased carbon in his soils. He acknowledges it is subjective, but the soil is more resilient and less susceptible to pugging.

To support fertility, Matt uses lime, dolomite and reactive rock phosphate. A broad range of minerals and microbialis are supplied through EM (effective microorganisms), seaweed, fish fertiliser and liquid microbial brews.

Animal health
Matt is very happy with gains in animal health. There are still some issues with mastitis – he spends an average of $7.00 per cow, but this is much less than others. The real wins are with metabolic issues with very little milk fever and no bloat.