

A 30-year journey of biological farming

A NARRIKUP farming family has discovered that adopting biological mineral farming methods on their property can draw big dividends.

They have dramatically increased production and gross margins and have greatly reduced their costs through lower inputs.

Stephen and Kerry Frost, Stonemeal Farm, began clearing their land almost 30 years ago and noticed a distinct difference in production between the land that was already developed and the land that they had cleared.

The differences appeared in both clover and sheep health.

Pasture disease was also prevalent and they had to grapple with red-legged earth mite, pasture scorch and powdery mildew, all while facing a huge increase in the amount of inputs they needed to manage these problems.

They began using large amounts of lime and chemicals and like most farmers they were faced with a dilemma – maintain current methods and keep battling or try to improve the situation with whatever means possible.

Their motivation was clear: to find a way to drastically improve the health of their land.

So 30 years ago they made the critical decision to undertake biological farming.

Now, their whole farm, including their home vegetable garden, through using the biological mineral farming system Grow Safe, is thriving and the results have to be seen to be believed.

Most importantly, this process of improving their land has improved their lifestyle and the health of their family.

"It was critical for us to protect our key assets," Stephen said. "Over the years, we held numerous trials, research and development, which, eventually led to our current sustainable and far healthier outcome."

"We are producing nutrient-dense food which is healthier for our family and we rely on biologically-compatible weed and disease control which protects our environment."

One of the first things Stephen did in the early days



■ Kerry Frost and her husband Stephen have been involved in biological farming for 30 years with results "to be seen to be believed".

was to research the minerals he needed for plant growth, animal and human nutrition.

This was done on the understanding that the fundamental difference between the new land and the developing land was mineral-related, based on the fact that a lot of sheep health issues were related to mineral deficiencies.

Stephen started to re-mineralise the farm using imported mineral fertiliser.

Except, there was a problem.

With WA being an ancient land, most of the minerals were long gone.

Stephen recognised that although he could apply minerals to his soil, there could be issues with the non take-up of minerals by the plants.

"I kept looking for answers and finally recognised the connection to soil microbes and in turn, their connection to healthy plants and animals," he said.

Then, in the late 1990s, after a chance meeting with a University of Western Australia microbiologist, Paul

Storer, Stephen was introduced to soil microbes.

It led him to better understand how important microbiology was to plant and animal health as well as their relationship to nutrient and water-use efficiency.

This understanding was the foundation of the current Stonemeal Farm management system, the Grow Safe farming program.

For Stephen and his wife, looking after the living soil immediately became their top priority.

Their desire to continually improve their knowledge of soil health and soil biology has kept them involved in ongoing research and development in the State.

Projects include exploring the positive and negative effects of farm inputs on soil microbes, ranging from fertiliser, nitrogen, herbicides and fungicides.

Consequently, the pair helped develop and fine-tune the soil and pasture management system they have used on their farm for the past 15 years.

Biodiversity is an addition-

al key consideration in the Stonemeal Farm management system. Encouraging biodiversity in trees, pasture, macro and microbiology has removed the need for insecticide and fungicide treatments on pasture.

"To protect the farm's biodiversity we manage the remnant vegetation," Stephen said.

"We plant local providence tree species, eucalypts for nectar, pollen, habitat and timber.

"We treat dams and water plants to improve habitat and the quality of stock water.

"We also have a variety of fodder trees and now have a significant planting of oaks for nutritional value acorns."

After many years of hard work and learning the Frosts are reaping the rewards and the results speak for themselves.

Their farm produces all farm fodder requirements: high yield/ha; high quality with great protein and metabolisable energy levels, with the usage of maximum 50 per cent of the amount of Phosphorous versus stan-

dard; very low Nitrogen requirement and no need for fungicide or insecticide in pasture and crops.

Even the levels of herbicides used are low.

Stocking rates are at district high at 3 wet/acre; lambing percentage of 110-140 (both Merino and Multi-Purpose Merino) and productive age - 8½ years lambing.

With low nutritional costs, soil organic matter is improving by 2-3pc per annum which is now an average 7-8pc across the farm and there's a high production on acid and higher sodium soils with reduced lime inputs.

The Frosts have proven that developing a farming system based on soil management and conservation practices is a living example of how to farm sustainably, profitably and in a healthy way that provides resilience, risk mitigation and results.

They hold the firm belief that when you actively engage in conservation practices in a farm management system, the productivity improves, as does profit.