

## Type of Farming System

### Home Block

The block had low phosphorus and was growing high levels of moss, English daisy and bent grass. The fertiliser history included the use of 4 & 1 continuously but switching to TNN cal-mag-phos at 250kg per ha 5 years ago. Also lime has been used at 5 ton per hectare over the past 20 years.

### New Block

Previous owners had cut hay and had crops of potatoes. They had not fertilised for over 6 years. Over the past 4 years, the farmer has used the same fertiliser regime he used on the home block and has also applied lime at 2.5-5 tons per hectare per year.

## Products used in trial







Bactivate Pus at 125Kg per Ha, BioBoost+ at 2L per Ha

Bactivate Seaweed Solution at 2Lt per Ha

+ Quin Phos (rock phosphate) 250kg/ac

## Background

The Trafalgar beef farm had signs of soil disease for 7 years since their purchase due to potato cropping. The degenerated soil quality directly affects the quality of fodder grown and further impacts beef growth rates and the number of animals raised per hectare/acre. The owner was seeking a whole of soil management system for the farm to improve soil quality where the goal is to produce 100 bales of silage produced on 8 hectares set aside in the top paddocks.

## Observed benefits

### Silage and Hay

After the Bactivate Program was implemented, the silage production increased from a standard 100 bales to 250 bales from the same paddocks in 2010. This season 150 bales of silage as well as 10 bales of hay were cut from the same paddocks. The farmer commented that this is the first time in 20 years he cut all the hay required at once.

**Farmer's Name:** Doug Brien

**Business Name:** Trafalgar beef

**Breed:** Euro and Black Angus

### Farm Data

**Location:** Trafalgar

**Area:** 200ac (100ac home block + 100ac new)

100% of the farm is under the Bactivate Program

## Herd Health & Beef Production

Herd health indexes showed the beef quality has improved over the past 12 months. For instance, the hook weights increased from 200-220kg to 250kg and the fat scores have steadily risen from 3.4kgs to 3.85kgs. The farmer's profitability has increased by roughly \$1.30 per kg.

The head of cattle on the property has almost doubled. More importantly, the extra cattle along with the existing herd are consuming the same amount of hay that was previously consumed. It was expected that there would be a need for extra hay, but instead, the cattle are getting what they require from the pastures. This is a strong indicator that the pasture quality has improved.

The instance of scouring on cattle has also disappeared after the Bactivate Program was implemented (Fig 1&2).

In conclusion, there has been a reduction in the amount of chemical fertilisers that were used on the property, signs of soil diseases have gone and the pasture is growing vigorously. The heard health in general is great and the quality of meat has been measurably improved.



Fig 1. Scouring cows in June 2011



Fig 2. No instance of scouring June 2012



Fig 3. Paddock with Rhizoctonia in June



Fig 4. Paddock post treatment Feb 2012