

### **Description of Property**

The property is a beef farm based in Trafalgar on 200 acres. The Home Block section of the farm (100 acres) has been in commission for 20 years. A further 100 acres was purchased 7 years ago, some of this being old potato farming land. The property is on an elevation of approx. 1000 feet above sea level.

Most of the cattle are Euro's and recent cattle purchased have been Black Angus.

### **Fertilising history**

**Home Block** - Until 5 years ago, used 4 & 1 every year, then switched to TNN cal-mag-phos at 250 kg per ha. The block had low phosphorus and was growing high levels of moss, English daisy and bent grass. Also used 2 ton per acre of cheap lime each year over 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 owner has used his current fertiliser regime and has also limed at 1-2 ton per acre per year

**Bioactive Program** – In March, 2011, the owner changed the fertilising program to 50Kg Bactivate Plus, 1Lt Bactivate Bioboost and 250 Kg Quin Phos (rock phosphate) per acre

### **Results**

#### **Silage & Hay**

20 acres is usually set aside in the top paddocks for silage, as the owner requires around 100 bales. We applied the **Bactivate Program** to the paddocks set aside for silage in March 2010. The silage harvest of 2010 went from the standard 100 bales of silage to 250 bales from the exact same paddocks. The only difference was the **Bactivate Program** was implemented.

This season, 70 bales of silage were cut from the same paddocks early (20 acres), a further 75 bales were cut in November as well as 10 bales of hay from the same paddocks



**Figure 1** - Silage Paddock June 11



**Figure 2** - Silage paddock Feb 12

Figure 1 shows the paddock that will be cut for silage in June, 2011. We were anticipating bumper growth based on Winter growth. Figure 2 shows the same block after two cuts for silage. The farmer didn't have the chance to cut it again for hay and was staggered at the regrowth by February 2012.



The farmer also commented that this season he has cut all the hay he required. This is the first time in 20 years that this has occurred. He is also running almost double the head of cattle on the property since the implementation of the **Bactivate Program** and is still using the same amount of hay that he has used in previous years with half the herd. Previously, 40 head would eat one bale per day. Now, 70 head are eating one bale per day. The cattle are getting more nourishment from the pasture now that the **Bactivate Program** is being used.

### **Herd Health & Beef Production**

In past years, the owner has had an average hook weight varying between 200kg – 220kg and an average fat score of 3.4. He was getting an average of \$2.30 per Kg. The following table outlines the improvement in hook weight and fat scores over the past 12 months

<b>DATE</b>	<b>NO. CATTLE</b>	<b>AVE. HOOK WEIGHT</b>	<b>AVE FAT SCORE</b>
10 <sup>th</sup> Oct 11	4	228Kg	3.5
23 <sup>rd</sup> Nov 11	7	248Kg	3.7
12 <sup>th</sup> Jan 12	8	257Kg	3.85

The hook weight and fat scores have increased over the past 12 months on a steady rise. The farmer is now also getting between \$3.50 - \$3.80 per Kg due to the improvement in the quality of the meat. The farmer is now also noticing a serious decline in the amount of grain they are feeding to finish off. The next batch of cattle to go to butcher will not require any grain at all as they are ready from the pasture and silage.

The instance of scouring has also disappeared. 12 months ago, most of the cattle were scouring. We didn't find any instances of scouring upon our inspections this February.



Figure 1 – Scouring cows in June 11



Figure 2 – No instance of scouring Feb 2012

### **Conclusion**

This property has been on the full program for only 12 months, and the improvement in the quality and amount of pasture and the improvement in herd health have been remarkable. There were paddocks that we treated with the **Bactivate Program** that had been showing signs of soil disease for 7 years since their purchase due to potato cropping that are now in full rotation with all the other paddocks. The signs of disease have gone and the pasture is growing vigorously. The herd are heavier and have greater fat scores, and the quality of the meat is excellent. Signs of scouring have disappeared and the herd health in general is great.

By implementing our program and reducing the amount of chemical fertilisers that were being used on the property, the farmer has now increased the profitability of his business.



Figure 1 – Paddock with Rhizoctonia in June 11



Figure 2 – Paddock post treatment Feb 2012