

## Case Study

### Kikuyu for feed & control of wind erosion

**Erica and Phil farm a property 25-30kms north east of Esperance on typical sand plain soils.**

**They host an EverGraze Supporting Site which has a variety of annual pastures and crops on the property and a mix of sheep and cattle.**

The property had a paddock of kikuyu that had been sown in 2003 by Erica's parents. After the positive experience gained in this paddock, Erica and Phil decided to plant more kikuyu. They had found the kikuyu responded well to summer rainfall and reduced the need for supplementary feeding when other feed was in short supply. This resulted in them being able to turn off animal quicker as well as reducing wind erosion on the lighter paddocks. There is now about 250ha established.

#### *Establishment method:*

To establish kikuyu, the paddock was sprayed with a double knock using initially 1.5 L/ha of roundup in preparation for a September plant. This was then followed up one month later by 1 L/ha of spray seed. The paddock was then planted with 1 kg/ha of kikuyu (Whittet). Alpha-cypermethrin was used post establishment for wingless grasshopper control.


The paddock was fertilised with super potash 3:1 at 125kg/ha at planting. This was followed up the next year with 100kg/ha of super phosphate and 60kg/ha of sulphate of ammonia.

The aims for establishing the kikuyu were to provide more out season feed and stabilise the paddock. The kikuyu was able to provide both of these however the story was not that simple.

As can be seen the kikuyu was providing a significantly higher DSE throughout 2008 (29.5%) and 2009

farm info.

**Producer:** Phil Cleghorn and Erica Ayers  
**Location:** north east of Esperance, WA  
**Property size:** 1250 ha  
**Soils:** gravelly sand over clay  
**Enterprises:** Mixed farming system, sheep, cattle, cropping  
**Pastures:** kikuyu and annuals



(24.5%) and has shown similar results to date for 2010. In particular in the summer/autumn period of 2008 and 2010 the kikuyu had significantly higher stocking rates than the annual paddocks (Table 1 & 2). However, these high summer stocking rates should not be used in isolation as the supplementary feeding required to maintain these stocking rates needs to be considered (Table 3).

The supplementary feeding data for the two paddocks however tells a different story. The kikuyu paddock had significantly more lupins and hay fed out than the annuals over a two and a half year period. Interestingly though this mainly occurred in 2008 with no supplementary feeding on kikuyu in 2009 and only lupins used across an 85 day period starting in April 2010 (Table 3).

As the figures suggest, 2008 was a particularly difficult season with a late break and little early feed. The annual paddocks were starting to become bare and were susceptible to erosion so the kikuyu was essentially used as a feedlot. It was stocked for approximately four and half months with almost all of the feed going on to the kikuyu during this extended period of grazing. This same pattern revealed itself again in 2010.



Phil Cleghorn and Erica Ayers

#### key points

- Kikuyu provided a significantly higher DSE and stocking rate when compared with annual pasture.
- A discounted cash flow analysis of the returns from the perennial and annual systems over 10 years has been undertaken.
- Kikuyu helped to provide out of season feed and reduced the threat of wind erosion.

While the supplementary feed is attributed to the kikuyu paddock, the results show how perennials such as kikuyu have a significant role to play in the whole grazing system.