

# FARMER CASE STUDY

## *50DSE/ha is not a dream*

**Farmer:**

David & Sue Monks

**Location:**

Badgingarra

**Soil Type:**

Deep white sand

**Annual Rainfall:**

600mm



**Main Money Earner:**

Sheep and cropping

**Pastures:**

Kikuyu, Strawberry Clover, Rhodes and Seradella



Achieving stocking rates of over 50DSE per hectare is something most farmers dream of. But this is what Badgingarra wool growers David and Sue Monks have been able to consistently achieve on an 80 hectare area of their farm. The area grows a very productive perennial pasture of mainly Kikuyu and Strawberry Clover. It is so productive that they can run all their weaner sheep on it.

The country that this perennial pasture grows on is relatively unique as it is effectively irrigated by “fresh” seepage water. An ironstone barrier holds back water that seeps from sandy country higher up in the catchment, maintaining a high, year-round water table of less than 1 metre. The perennial pastures tap into this shallow water table to produce year round green feed.

The soil that this pasture grows on is deep white sand, with extremely low organic matter and fertility. It is highly susceptible to wind erosion. The perennial pasture has transformed the soil by building massive amounts of organic matter, or as David puts it “growing soil”.

As a result of very high productivity, David heavily fertilised the area, using as much as 500kg/ha of a Super Potash blend in some years. No nitrogen is applied. Nitrogen fixed by the Strawberry Clover appears sufficient.

The perennial pasture is producing wool that is both very sound (high tensile strength) and clean (low VM). Combine this with David’s fine wool genetics and you have a recipe for good returns from wool. Most producers would expect that grazing weaner sheep on this type of country for extended periods would pre-dispose them to worms. However, David has found that a combination of rotational grazing and strategic drenching has kept worms under control. The rest period created by rotational grazing helps to break the worm life cycle.

David has learned recently that although he has green feed through summer and autumn, it is not always high quality. Through late summer and autumn, the pasture becomes Kikuyu dominant, as the Strawberry Clover content declines. The quality (energy and protein) of Kikuyu at this time of year can be sub-optimal for growing sheep. In the past he suspects his weaner sheep have actually lost weight while still growing wool!

In 2004 he supplemented his weaner sheep with oats and lupins while they were grazing the Kikuyu pasture. The results were spectacular with significant weight gains recorded. By adding additional energy and protein the weaners were better able to utilize the green feed on offer. David calculated the return on investment from supplementation was an amazing 278%!

## *50DSE/ha is not a dream*



*Close up of the Kikuyu and Strawberry Clover Mix*



*A paddock of Evergreen Mix and Cadiz serradella oversown - a winning combination*

### **Cadiz Serradella**

On “Adelong” paddocks with well drained, sandy soils, Cadiz Serradella is grown as a seed crop. Cadiz, with its deep root system and ability for extended spring growth, is seen as an ideal plant for these soil types. Being a legume it is able to fix its own nitrogen, which is often a limiting nutrient on these soils. Cadiz’s deep root system allows it to delve deeper for moisture in these low water holding capacity sands.

David uses Cadiz seed to enhance pasture in other paddocks. He broadcasts it onto pastures of Evergreen Mix to fix nitrogen for the grasses and sows it with oats to improve the quality of fodder crops.

### **Evergreen Mixes**

Sand over clay soils at “Adelong” are prone to waterlogging and mild salinity. David has sown Evergreen Mixes (Rhodes, Setaria, Panic, etc) on these soils with great success. Some Kikuyu is added and is doing well in the low lying areas. Rhodes Grass is the standout performer, with its ability to rapidly cover bare ground. Cadiz serradella is broadcast onto these paddocks to provide a companion legume. The mixture of annual legume and perennial grass appears to be very successful.

### **Tagasaste**

Forty (40) hectares of Tagasaste has been planted on “Adelong” to control wind erosion and provide out of season feed. It is opportunistically grazed especially in autumn and spring. David says that, contrary to popular opinion, sheep and Tagasaste combine well, but only if the Tagasaste is grazed hard and cut occasionally. He also says the Tagasaste is best utilised when stock have access to adjoining annual pasture paddocks.



*An excellent Cadis Serradella seed crop growing on well drained sand*

Note: David and Sue Monks have recently sold “Adelong” and moved to a larger farm closer to Badgingarra.