

FARMER CASE STUDY

Two perennials are better than one

Farmer:

Phil and Helen D'Emden

Location:

Jerdacuttup

Soil Type:

Gravelly Sands

Annual Rainfall:

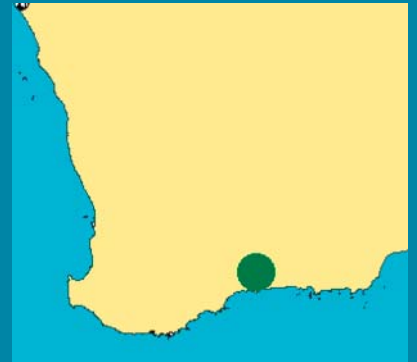
437mm

Main Money Earner:

Perennial pastures and sheep

Pastures:

No-till disc drill with press wheels



Phil and Helen D'Emden farm "Poplar" at Jerdacuttup, 140 km west of Esperance. Summer rainfall is a given, with an average of 133 mm falling between November and March each year. This equates to 30% of the annual average of 437 mm. But it can vary substantially ranging from 35 mm in the 72/73 drought to 293 mm in the wet 99/00 summer.

Large areas of perennial pastures have been established over the last 8 years to make use of this out of season rainfall and convert it to valuable sheep feed. Lucerne and Rhodes grass have both been planted and Phil believes both have a place.

200 hectares of each species has been sown.

Lucerne was sown in 1998, 1999 and 2001 and included the varieties Sceptre, Aquarius, Eureka and Genesis. Sowing rates were 4 to 5 kg/ha and all stands were sown in June and July with a no-till disc drill with press wheels. The paddocks sown in 1998 and 1999 had been continuous cropped prior to lucerne establishment. Weed control during establishment was excellent producing good plant densities of at least 40 plants per metre. This compares to the 2001 sown paddock which came straight out of annual pasture. This paddock was overrun by sub clover and erodium during the

establishment phase which reduced initial plant density. As a result, the ongoing productivity has not been as good as the first two paddocks.

Lucerne has been very useful for Phil's prime lamb operation allowing winter drop lambs to be finished on pasture over summer without grain supplementation.

The recent very dry 04/05 summer has thinned some of the lucerne stands.

Phil believes that his lucerne paddocks have about the same year round carrying capacity as good sub clover based annual pasture. The advantage however is the ability to fatten lambs over summer on lucerne.



Tightly grazed Rhodes grass

Two perennials are better than one



Dohne rams grazing a dense Lucerne stand

Lucerne has so far been used as a long term permanent pasture at “Poplar”. Paddocks are generally either permanent pasture or in continuous crop but thin stands of lucerne will be cleaned up and converted over to cropping in the next few years.

One problem with lucerne is that to maintain a good stand density, the paddocks must be destocked when there is no rain and hence no lucerne growth. This creates a problem if large areas of the farm are planted to lucerne, as there are limited paddocks that stock can graze in. One solution is to plant another perennial pasture species that can be grazed during dry spells. Enter Rhodes grass.

Rhodes grass has been established in early October in both 2003 and 2005. A combination of Callide and Katambora varieties was used each time with sowing rates varying from 2 to 4 kg/ha. A double knock weed control strategy was used both years with the first spray usually 5 to 6 weeks pre-sowing. The second spray was applied just before seeding. Superphosphate is used a carrier for the light and fluffy Rhodes seed at a ratio of 25 kg of fertiliser per kg of seed. The Rhodes grass is sown with the same no-till disc drill used for lucerne. An excellent strike occurred in both years, aided by good spring rains.

The exceptionally dry spring and summer experienced in 04/05 meant there was insufficient lucerne growth to finish lambs on. So Phil decided to lot feed his lambs instead. Lambs were fed in paddocks with dams rather than a feedlot pen with troughs, because of concerns over reliability of water supply.

The risk of erosion ruled out using annual crop and pasture paddocks. And the susceptibility of lucerne to over grazing made those paddocks unsuitable. So Phil ended up using some Rhodes grass paddocks for feed lotting.

In one 19 ha Rhodes grass paddock 600 lambs were lot fed from February until April. They received an 80:20 barley lupin mix in self feeders with straw and hay fed separately as roughage.

The Rhodes grass did suffer from the intensive stocking with a small decline in plant density, but Phil believes that with some strategic spelling it will recover in time. Two other Rhodes paddocks were also used for lot feeding albeit at lower stocking rates. All 3 held together extremely well with no erosion.



Lambs were lot fed in this Rhodes Grass paddock over the summer and autumn of 04/05