

Mitch & Ros Willson

Farm details:

Rainfall: 540mm

Soil type(s) incl. pH: Limestone sandy soils pH_{CaCl2} 6.5-7; River Flats (have been limed to pH ~6).

Fertiliser History: 46 Colwell P average, 150kg single each year plus traces every 8 yrs.

Stocking Rate: 14.8 DSE – but aiming to get back to 12-13 DSE. Found 14.8 too high/bit stressful in 2024

Grazing System: a mix of both set stock and rotational grazing. Stock movements are guided by pasture growth rates and to help manage worm burden and problem weeds. Kikuyu paddocks are used as sacrifice areas rather than formal confinement set up.

Below: Mitch stopping to smell the pasture.
Photo: Ros Willson.



Perennial pasture species – what worked/what didn't

1. Phalaris

About 15% of the farm is now sown to phalaris and Willsons are looking to increase the area sown. They initially seeded it because, in Mitch's words "it's tough and you can't kill it". However, overgrazing will thin it out, and it performs best on heavier soils rather than ironstone country. There have been occasional health issues (e.g. sudden death), so management is important.

Mitch & Ros's recipe for success with phalaris:

- ✓ **Hay freeze the paddock the year prior to seeding**, then, depending on the season:
 - In **August spray the site out** and include an insecticide
 - **Seed in September** (they direct drill)
 - **Graze once in summer** (late Dec/Jan).
- ✓ Then **rest paddock through the first summer** (phalaris seeds in January, so keep stock out during this time.)

2. Cocksfoot

Has been tried but it was not successful. It was grown as a means to extend the feed season, but it didn't persist due to over grazing (it was sown in a sandy paddock and stock pulled it out). Plus, there were issues with weed control and seeding technique. With a new seeder and better knowledge of favorable soil types, Willsons are keen to try again on heavier soil types.

3. Kikuyu

About 30% of the farm is sown to kikuyu and it does best on their sandy limestone soils (they have found it won't persist on heavy soils). It's great for reducing capeweed, provides green feed for weaners over summer and handles high stocking rates/ heavy grazing.

Mitch & Ros's recipe for success with kikuyu:

- ✓ **Seeding system similar to phalaris.**
- ✓ **Crop the paddock prior to seeding.** Useful if going into rough country – provides an extra working to clean the paddock up and reduce the weed burden.

A few lessons learned with kikuyu:

- The thick stands in summer will reduce runoff into dams.
- Needs good grazing management; don't let the sward become tall and rank as this prevents clover coming through.
- Not as productive over winter.
- Can cause issues with worm burden compared to annual pastures i.e. green bridge over summer. This issue can be easily managed through rotational grazing and drenching; it's a problem that can be easily managed. Farmers just need to be aware of it.

4. Lucerne

Mitch and Ros tried lucerne, but it was grazed out by roos/wallabies. Don't try unless you have a vermin proof fence!

5. Perennial Ryegrass

This has been tried, and like phalaris goes well on heavy clay soils. It is not suited to sandy soils.

Lessons learnt

- It's all about good paddock preparation – you need to work on weed control for two years prior to seeding (or at least one year). Check pH and lime if required.
- Right plant right place (i.e. match plant to soil type.)
- Manage your grazing pressure (and control vermin!)
- Let it get well established in the first year.
- Manage the pasture well over summer; DON'T see a plant and eat it!
- Grazing pressure – let it set seed for regeneration.
- You can't have all the farm sown to perennials as you need to manage grazing pressures.
- Establishing perennials is expensive so you need to manage/maintain the pasture for many years to justify the cost
- If you have significant portions of the farm sown to perennials you will need a containment set up or sacrifice paddocks to enable you to adequately rest the sown pastures.

The winners:

‘ If we had to back a winner, it would be kikuyu for sandy country, and ryegrass, phalaris or cocksfoot on heavier country.’

— Mitch & Ros

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