



Preparing and managing pastures for drought

Greatest enterprise challenges

The Burando property is located approximately 15 km northwest of the Bombala township in the Monaro region of the Southern Tablelands of NSW. Burando is owned and operated by the Jeffrey family, Delegate Station Pastoral.

The enterprise on the property is a self-replacing composite ewe flock. It is the main breeding centre including the growing out of the ewe lambs for joining to lamb at around 12 months of age. Most of the ewe lamb growing out is done on lucerne pastures and winter crop, while the breeding pastures are restricted to Phalaris, native country, and crop residues.

The better arable country is rotated with a three year dual purpose crop and seven year pasture phase. Typically, lambs are weaned at 60–100 days with the ewe lamb portion staying to grow out on lucerne while the wethers are transported to a separate property to be finished.

For John, managing soil moisture strategically is key to the success of his cropping and prime lamb enterprises.

“For us with a sheep meat focus it revolves around growing high quality feed with legume focus (annual clovers with perennial grass for breeding, lucerne for growing out ewe lambs). Optimal stocking rates and animal performance are achieved by utilising as much dry matter as possible relative to animal production status, while preserving at all costs the high-quality feed for critical periods.”

Johns’ annual crop system is a tool he uses to provide critical winter feed and prepare country for perennial pastures.



Farm Snapshot

Owners: John and Jen Jeffreys

Location: Bombala, New South Wales

Farm size: 1,620 hectares

Average annual rainfall: 560 mm

Elevation: 730 m

Soil type: brown dermosol

Topography: gently undulating hills formed on both Ordovician metasediments and Tertiary basalt

Enterprise: self-replacing composite ewe flock

Pastures: Lucerne, Phalaris, Sub, Arrow leaf

DSE: 16 DSE (Annies Paddock)





Annie's Paddock – Post Drought – March 2021 – maximum production potential

“In this region that can receive summer rainfall, the cropping program is able to preserve this moisture to provide critical winter feed. These paddocks can provide up to 6t DM per ha during the winter period that is traditionally the feed deficit”.

Observations on pasture resilience post last drought

Phalaris, lucerne, sub, arrow based pastures

1. Persistence seemed to be determined by the preceding years (multiple) pasture management, not by any single management activities once drought hit.
2. The more productive pastures (ie high legume content) recovered better, where the perennial species growth habit was not as dense ie. had not formed a “mat”.
3. Management that helped in previous years seems to have been around addressing soil constraints that restrict pasture growth, grazing management that promotes maximum dry matter and allowing perennial species to flower on establishment and at least once every 3–4 years.
4. A high previous stocking rate (pre-drought) did not seem to impact pasture recovery except in the smaller paddocks close to the yards where the pasture had been kept constantly flat and subsequently disappeared on the bare/more denuded, exposed parts of the paddocks.
5. Sacrifice pastures that were used for containment feeding appeared better post drought than previous, but they were only used for feeding for approximately 2 months.

Lessons learned

Some of Burandos key strategies to manage drought risks include flexible stocking rates, a breeding focus, lambs finished off farm, containment feeding when necessary and strategic intensive grazing programs.

To improve pasture tolerance to drought, John uses a proven intensive grazing program, optimised pasture nutrition, and structured crop rotation systems.

Lessons learned from previous drought periods include being flexible around enterprise choice to vary stocking rate pressures, having a buffer (i.e. sacrifice crops), weaning early, feeding to ewe status, sacrifice paddock feeding and a move away from grain only feeding. Ewes need plenty of room to walk around to maintain fitness, unlike feed lotting lambs where the primary goal is weight gain.

Investments made to adapt better to the next drought include more considered fencing to land class, smaller paddocks with good water infrastructure and significant investment in silage infrastructure.

Strong perennial pasture paddocks generally have an increase in performance post drought after being used for containment feeding. This observation is most likely due to a concentration of nutrients.

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For more information

Watch John Jeffrey’s testimonial about the project.

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