Filling the winter feed gap – 'all hail the kale'

Producer case study: Mark and Catherine Fraser

Location	Macarthur, Victoria
Area	560 ha
Enterprise	Beef cows producing steers and heifers for sale. Prime lamb production.
Livestock	260 cows, weaner steers, heifers and trade cattle, 120 Suffolk ewes
Pastures	Mix of perennial ryegrass and phalaris pastures
Soils	Basalt volcanic plains, loams and silty loams over an impervious clay base and heavy black clays
Rainfall	745 mm

Mark and Catherine Fraser, farming at Macarthur, in South West Victoria, were finding their autumn break less predictable for growing a feed wedge going into winter.

Their goal was to optimise their winter stocking rate without having to feed heifers and steers. At 745 mm annual rainfall, paddock trafficability became difficult over winter.

"The paddocks get really wet, making getting in and out of paddocks to feed difficult. Tractors would leave trenches and stock pugged up the paddocks," said Catherine.

To overcome this issue, the Frasers were autumn saving pastures and holding stock in sacrifice paddocks before starting rotational grazing. They also optimised growth by allowing grasses to grow three live leaves per tiller before grazing, maintained good nutrient levels and used nitrogen fertiliser to boost growth.

Another avenue to boost growth was species choice.

Catherine said, "We tried tillage radish but it set seed and then returned like a weed but we plan to sow 2 kg/ha of it with 100 kg/ha of oats as another trial."

They saw kale successfully grown on a nearby farm during a BestWool/BestLamb group visit and were impressed.

They sowed two 13 ha paddocks in October 2023 at a cost of approximately $500/ha once urea and potash were applied.

Catherine said, "Kale is not for the faint-hearted. You can only watch it over summer but not graze it. In summer it grew one foot high, but then just sat there. We had to do two sprays to protect it from diamondback and white cabbage moths."

Image 1 *Catherine and Mark Fraser standing in their mid-October sown kale crop on May 2nd, 2025.*

Once cooler temperatures occurred, Catherine observed the kale change colour and then started growing.

“It achieves 80% of its dry matter growth in autumn,” said Mark.

In the dry 2024, when annual rainfall of Decile 2 occurred, they were very happy with its production.

“The paddock on a heavy basalt soil grew 4.4t DM/ha and the other paddock a loam, got away more quickly and so grew 7.8t DM/ha,” he said.

They strip grazed each paddock with heifers and steers.

Catherine explained, “Stock didn’t get moved until they had eaten down stalks to 20-30cm height.”

They found the ungrazed kale continued to grow and towards the end of winter was 1.8 m tall.

The 7.8 t/ha paddock held 193 steers for 75 days from June 7 to August 23, averaging weight gains of 1.15kg/day. Mark explained, “This was close to 15 head/hectare.”

“They went in at 305 kg and came out at 390 kg with minimal supplementary feed other than some ad lib hay and silage initially to help them adjust onto the kale. This worked out to be a cost of 8 cents/kg of DM, considerably cheaper than buying in quality cereal or vetch hay and having to feed out at 40 cents/kg.”

Feed test results of the kale leaf achieved 14 MJ of ME/kg DM but the stalk was still impressively high at 12.9 MJ when tested in mid-June.

Another advantage was that it helped to contain the pugging effects they normally experience to mainly just the kale paddocks.

In 2024, they sowed another three crops in mid-October and despite having 23mm in December 2024 and 34mm in 2025, the crop is already doing well (pictured).

Mark said it is very drought-tolerant with its tap root.

The Frasers are yet to experience a wet year grazing the kale. However, if waterlogging occurs in mid to late winter, the kale will have already expressed the majority of its growth.

Catherine said that strip grazing got cattle used to seeing people and has made them super quiet.

“Having kale allows us to trade cattle. With the extra feed we grew in 2024, we calculated we wouldn’t have enough mouths to eat it all off, so we purchased 120 steers,” said Mark.

Now with more confidence and experience, they are keen to try and halve their strip widths from 15m down to 7m to reduce wastage.

They are also keen to purchase Optiweigh scales for in-paddock monitoring.

“Kale seems to be a good fit for our farm, but Mark is still keen to try a few different things,” said Catherine.

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