

Early pasture dieback onset and recovery

Anna and Tim Gilliand, Doon Doon, NSW

Initial signs of pasture dieback

Before dieback, Anna and Tim's pasture was mainly kikuyu, a species which is highly susceptible to the condition. In autumn 2019, during drought, the pasture began to turn purple and die. "We didn't realise what it was ... we just thought the ground was really dry ... then it hit hard in 2020," Tim recalled.



Aerial imagery of early dieback impacts

Pasture re-establishment

In response to the challenges posed by the farm's topography, Anna and Tim have explored accessible and low-disturbance approaches to pasture resowing.

In spring 2023, Signal grass was hand-broadcast into a paddock where kikuyu had been lost. Establishment was initially patchy, but the Signal grass has since begun growing into gaps, and the paddock is supporting a healthy stand of self-seeded Setaria.

In February 2025, two paddocks were drone-sown with Setaria Narok and Butterfly Pea. The flatter paddock was ripped before seeding and harrowed afterwards. Butterfly Pea establishment was poor due to an extremely wet autumn, while Setaria established successfully.

Site overview:

- 270ha cow and calf block.
- Red basaltic hills, clay loam flats.
- Median rainfall: 1600mm/year

Trial details

In response to ongoing challenges with dieback, a plot trial has explored which tropical and temperate grass species perform best under local conditions, with results supporting Anna and Tim's choice of pasture recovery species.

Further paddock-scale trials are monitoring the establishment and persistence of Signal grass, Setaria, and Butterfly Pea plantings.



Paddocks prepared for Setaria drone seeding February 2025



Well established Setaria - Signal Grass paddock

Pasture dieback resources

- Identification guide
- Case studies
- Videos



www.bit.ly/pasture-dieback