

- ► Location Glenburn
- Property size
 835 ha (2060 acres)
- Landscape
 Mix of flats, undulating hills, some steep hills with remnant
- ➤ Soils

 Mostly Kandosols, with patches of Sodosols associated with drainage areas
- Rainfall
 750 mm av/yr

vegetation

- ► Enterprise

 Cross-bred prime lambs,

 Angus beef cattle
- Owner
 David Webbware (pictured)

One of the low undulating hills on David Webbware's 835 ha Glenburn property was a sole reminder of past farming practices.

"It had become quite damaged since the 2006 drought, with clouds of dust coming off it during summer and early autumn," David recalled.

To fix the problem David land class fenced the paddock in 2013 with assistance from a grant. David's father Ken began the process of land class fencing the steeper hills in the 1970s, separating out the north and south grazing aspects first.

"The sheep prefer to graze the north faces of hills, leading to overgrazing and infestation of weeds such as capeweed," said David. Soils are then bare in summer. Sheep camps on the hills also created high soil nitrate concentrations that washed down to the lower country after solid rain.

"All this land class fencing has been really good to us, as it has meant we can keep the soil where we want it, and we get much more out of the farm," said David.

Now the hill top features a mix of ryegrass, barley grass, cocksfoot, corkscrew and a fair cover of capeweed. David intends to reduce the weed cover through spraying and timed grazing, before they reach flower and seed-set stage. Then "by excluding stock over summer," David said "I will gradually achieve a better pasture composition."

David knows his pastures and stock requirements well, and sees pasture volume as one of the most important considerations. He makes sure he has a minimum of 1500 kg/ha for twinning ewes and 1000 kg/ha for single lambing ewes.



Although operating with high stock numbers (1900 July lambing cross-bred ewes, 300 spring calving Angus cows and 420 year-old heifer and steer calves), David sees limits to production on this undulating country. "I estimate 25 DSEs as a maximum, beyond that there are too many risks to the soil – in summer baring out and in winter pugging."

On the flats David has continued the fencing program, so all paddock areas are reduced to a maximum of 15 to 20 ha for better pasture and stock management.

David recently completed a phosphorus workshop, with the Department of Economic Development, to calculate the most efficient rates of application. For David's farm it worked out as 1.0 kg of P per DSE for maintenance. His current rates were close at 0.8 kg, applying between 120 to 250 kg/ha single super depending on soil test results and the carrying capacity of each individual paddock.

With a soil pH (in CaCl₂) of around 4.0 in unlimed country and 4.8-5.0 in limed, David sows phalaris varieties that are more acid tolerant. Every 10 years he applies lime at a rate of 2.5 tonnes/ha.

David said they are "moderately deficient in potassium on the low country due to a past history of annual hay cutting." He drew up a rough spreadsheet on the cost of making hay against the cost of buying it and now buys most hay required, as well as adding potash to the old hay paddocks.

As part of running a productive farm, David places great value on the natural assets of his property. He has fenced off waterways, added storage dams with a trough system and revegetated swampy areas. His daughter Emily, who is also studying agriculture, has more plans for protecting paddock trees and adding extra native vegetation to their farm.

David plans to revegetate an area adjoining the land classed hill paddock to link with a mature yellow box currently protected by a fence around the trunk.

"It's my favourite tree on the entire place, it would be a tragedy if that one died," said David. He explained that a number of years ago a large stand of remnant yellow box appeared to be dying, losing nearly all their leaves. By building a fence around the whole grove to exclude stock access, the eucalypts returned to health.

"I'm convinced that retaining healthy remnant trees on the property is critical to the environmental sustainability of the farm, and worth spending considerable time and money to achieve."

Keeping weeds and pest animals at bay also requires David's vigilance and regular treatment programs.

The benefits of protecting and improving the property's natural features, combined with land class fencing, certainly outweighs the costs and effort and just "makes sense," said David.

- For more information about improving soil health and the Goulburn Broken Catchment Management Authority's Australian Government funded SoilCare program visit the Land Health page at www.gbcma.vic.gov.au
- For more information on sustainable farm management visit the Agriculture page of the Department of Economic Development, Jobs, Transport and Resources at www.economicdevelopment. vic.gov.au