

Grazing management to get the best out of forage shrubs

Grazing management is critical to realising the benefits of any shrub–pasture mix. If livestock heavily graze the inter-row pasture before eating the forage shrubs, the complementarity of shrubs and pasture is lost.

Shrubs must be grazed at least annually with high grazing pressure to ensure shrubs and pasture are utilised together. Stock that are new to shrub-pasture systems need to be trained onto their new diet.

Best practice grazing management for shrubs

To get the best out of forage shrubs, it is important to graze at least annually, and in years of plentiful growth twice a year. Stocking densities need to be high to promote even grazing. This usually means that shrubs need to be fenced and paddock size needs to be small. Short, sharp ‘crash’ grazing keeps shrubs short and productive. Grazing with cattle and older experienced sheep to ‘finish up’ shrubs which have grown out of reach of smaller animals is also a useful option if available.

Set stocking at a low density for long periods will promote selective grazing of the pasture and also increase the risk of retarding regrowth of the most preferred shrubs, which are more likely to be continually grazed. This will deplete shrub resources and eventually kill these plants. Less preferred shrubs will grow become too tall and woody.

Maintaining a good supply of fresh water is critical. Old man saltbush has a high salt content, and livestock will quickly drop feed intake if water is unavailable or the water itself has a high salt content. This can happen within a day.

In any shrub–pasture system, pasture is a critical component of the overall feedbase. Shrubs alone cannot provide enough metabolisable energy (ME) for livestock production, but do provide a valuable source of crude protein and minerals. A mix of dry pasture combined with forage shrubs is much better for stock than dry pasture alone.

Where old man saltbush plantings are being grazed with limited complementary pasture, the high salt load of old man saltbush does limit livestock feed intake. As with any feeding system, animal requirements differ with class of livestock (dry, growing, pregnant or lactating). If higher weight gains are the target, or if pregnant ewes are grazing a shrub-based forage system, supplementary feeding is needed to provide additional metabolisable energy (e.g., good quality hay, grain, or companion pasture). Providing complimentary feed low in salt and higher in energy can result in livestock maintaining or even gaining weight. As with any feeding system, it is important to monitor the liveweight and/or condition score of animals, and adjust feeding management as required.

Tips for training livestock to utilise shrub–pasture mixes

Where pasture is available with forage shrubs, or where a variety of forage shrubs have been established, the aim is to avoid the animals eating the pasture or the most palatable shrubs first, and only moving on to less palatable shrubs later. This situation is not ideal for animal nutrition, or for the survival of the more palatable species, and happens most often with livestock unfamiliar with a shrub diet.



Below - High grazing pressure is needed to ensure stock utilise shrubs and pastures at the same time.

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Above - Temporary electric fencing can be used when training stock to try new feeds and better utilise shrub-pasture mixes.

There are four key management strategies that can be used to influence diet selection among livestock new to shrub–pasture mixes:

- 1.** Make sure animals are well fed when they first enter a new shrub-based paddock and that alternative feed is not limiting. Contrary to common belief, animals are less likely to try new feeds if they are hungry.
- 2.** Manage livestock so they are not stressed. If animals are forced onto a shrub-based paddock in poor condition or are highly stressed they will be less willing to try new feed sources.
- 3.** High grazing pressure broadens the suite of plants included in the diet because there is more competition between individual animals. Stocking rates of 30 to 50 DSE/ha have been used successfully in shrub-pasture mixtures. Temporary and moveable subdivisions with electric fencing are an option to increase grazing pressure when animals are first put in.
- 4.** Regular rotation through small patches of shrubs or subdivided paddocks is best, so that livestock can be moved frequently to provide a positive experience with the new feeds. Only a small number of positive experiences (normally 3–4) are required to change grazing behaviour quite dramatically. What may start as a low-preference plant species can quickly become an important part of the diet.