Mulga feeding in your drought management strategy

Mulga feeding can be an important part of an effective drought management strategy. This strategy should also include plans for moving and/or agisting stock, managing waters, protecting perennial pastures, and restocking post-drought. Below are some guidelines for managing through drought with the help of mulga.

- Prioritise your flock/herd. Know which stock you are most prepared to sell off or agist, and in what order, before the onset of the dry season.
- Reduce grazing pressure as early as possible in the drought, either by agistment or sale, to avoid carrying too many stock and reducing your longer-term carrying capacity.
- Concentrate fodder clearing in as small an area as possible to protect perennial pastures elsewhere.
- In areas outside the feeding paddock, close or fence all waters that you can to reduce access by other grazing species.
- Start pushing mulga at the farthest end of the fodder paddock from the water point, and clear back toward water as the dry season progresses and stock lose condition.
- Harvest mulga 2–3 days ahead of your stock so that they can access leaves with reduced tannin levels.
- Push mulga at right angles to the slope. This obstructs water flow down the slope and provides sites for grass seedling establishment.
- Try to keep stock in the fodder paddock for at least four weeks after the drought breaks. This allows perennial pastures time to respond and to send up seed heads.
- Once the property is restocked, rest the fodder clearing area for many months.

Mulga thickening

Mulga and other woody species can thicken over time, significantly reducing the capacity of land to support pasture. Woody thickening generally results from a combination of increased grazing pressure, reduced competition from pasture species, reduced frequency of fire and seasonal conditions.

Effective control of thickening on any property depends on the biological, economic and legal circumstances of that property. DPI&F can help you develop a plan that takes these factors into account through the Grazing Land Management program. For more information call 13 25 23.

Legal requirements

The Department of Natural Resources and Mines regulates the harvesting of mulga and other native plants for fodder. Restrictions apply as to where you can fell mulga for fodder. In all cases you should contact your local NR&M office to discuss these issues and ensure that you have the relevant approval to harvest fodder.

More information:
DPI&F Call Centre on 13 25 23  
www.dpi.qld.gov.au
Mulga as a fodder source

Mulga browse has been an important component of livestock nutrition in southwest Queensland for many years. Stock will browse fresh mulga leaves throughout the year. During winter, sheep may obtain up to 70% of their diet from browse and eat recently fallen green leaves when hungry. Fresh leaves have reasonable feed quality and can keep stock alive—or in reasonable condition with extra mineral supplements—but mulga is never a production ration.

Fodder value

Mulga contains chemicals called tannins to protect it from predators. Tannin levels are highest where and when the tree is most vulnerable—during drought, on lower branches, and in younger leaves. Interestingly, mulga’s fodder value improves for 2–3 days after harvesting due to declining tannin content. Beyond this period though, loss of nutrient value outweighs the benefits of reduced tannin content.

A mature sheep will eat 700–800 grams of mulga leaf each day under dry paddock conditions. This amount barely provides maintenance energy and high tannin levels in the leaf restrict available protein absorption to only 35–40%.

For dry stock, mulga digestion is improved by supplementing:
- 2 parts stock salt,
- 1 part sulphate of ammonia, and
- 1 part Kynofos, or other phosphorus supplement.

Additional supplementation is necessary for other, non-dry stock. Contact DPI&F on 13 25 23 for further information.

Costs and benefits of feeding mulga

Feeding mulga to stock has both positive and negative consequences that are recognised by both managers and researchers.

Potential benefits
- Availability of mulga browse during the growing season can increase productivity of average, and below average, country. In drier seasons it can maintain carrying capacity above what would otherwise be possible.
- Mulga branches left on the ground after a drought feeding operation can help the pasture to recover by reducing water runoff and soil erosion, and by preventing stock from grazing re-sprouting grasses underneath.
- The availability of mulga during drought allows the option of retaining valuable stock for longer.

Potential costs
- Carrying extra stock during a dry period may damage soils, especially near supplement feeding points. It also places extra stress on recovering grasses after rain, and reduces fuel build-up for fires.
- Lopping and pushing mulga may change open mulga woodland to closed mulga shrubland, reducing long-term carrying capacity by more than 50%.
- Sheep fed with mulga have low wool growth rates, often continue to lose weight, and may die if fed mulga for an extended period (9–12 months).
- During a stop–start dry period, eaten down tussocks may be damaged by hungry stock—preventing new roots from taking hold and reducing potential for leaf growth.

Mulga or pasture?

Both mulga and pasture play an important role in the sustainable use of mulga country. However they contribute very differently to grazing enterprises, and should be managed accordingly.

Perennial grass pastures are the cornerstone of grazing enterprises. Mulga soils have a particularly high proportion of total soil nutrients in the top 2–3 cm of soil. Perennial grasses are particularly useful for protecting this soil from erosion, and aiding water infiltration. Maintaining relatively dense perennial pastures ultimately means shorter, less severe droughts and faster drought recovery.

Mulga is an excellent stop-gap fodder supply for short periods of drought, and a useful supplement to grassy pastures in average–to–good years. However, when little pasture is available, stock will graze all grass they can reach into the ground, severely retarding post-drought recovery. When top feed is used to maintain grazing pressure indefinitely, pasture decline and soil erosion may proceed to the point where full pasture recovery is unlikely. This may trap an enterprise in what are effectively drought conditions for decades.

The key to managing mulga and pasture together is maintaining healthy pastures. In droughts, limit the time and area over which you harvest mulga. At other times use mulga top feed as a supplement to, not a replacement for, perennial pastures.