

Using saltbush to provide feed and shelter for livestock during poor weather

Block plantings of forage shrubs located near sheep yards allow stock to be given shelter and feed during extreme weather. During lambing, a shrub-based paddock during can also improve lamb survival. Small block plantings near sheepyards are a great way for farmers to make a start with forage shrubs and their management.

Types of shrub

Given its durability, Old Man Saltbush is the most commonly used shrub in situations where grazing needs to be flexible. It occurs naturally on heavier soils but will grow on a range of soil types. It tolerates saline soils but does not tolerate waterlogging for extended periods of time. Eyres Green and Anameka Saltbush are more recent varieties that have been selected for desirable traits (Eyres Green for biomass, Anameka for nutritive value), and can also be considered.

Planting design

For a shelter planting, shrubs are generally planted in blocks. Shrub density in this situation should be between 600 and 1100 plants/ha. Shrub spacing can be altered between and along the rows, but gaps should be 3 m or more. Planting too densely is likely to result in reduced shrub productivity due to competition between shrubs after only a few years. Mustering stock in dense shrub stands can also be a problem.



Shorn sheep sheltered in amongst saltbush

Examples of shrub spacing in a moderate density block configuration

Spacing between rows	Spacing between shrubs within each row	Shrub density
4m	4m	625 plants/ha
4m	3m	833 plants/ha
3m	3m	1111 plants/ha

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Seedling planting checklist

- ✓ Select paddock the year before planting.
- ✓ If possible control undesirable species while promoting any pasture seedbank that may exist.
- ✓ Choose the desired planting layout and calculate the number of shrubs needed.
- ✓ Order shrubs with the supplier by November the year before planting.
- ✓ By March the year of planting, deep rip the rows to be planted.
- ✓ Before the break of season organise a contract planter or the use of a planting machine.
- ✓ Carry out scalping or mounding along the shrub rows after the break to minimise the erosion risk.
- ✓ Use a non-selective herbicide along the rows after weed germination.
- ✓ Ensure seedlings are strong with a well-developed root system.
- ✓ Soak seedlings immediately before planting.
- ✓ Plant seedlings into moist soil achieving good contact between roots and soil

Establishment

Careful paddock preparation is most important when establishing forage shrubs – the benefits of thorough planning and preparation are significant and long lasting. The most common method for establishment is planting seedlings (see checklist). The various steps include weed control the previous spring and in autumn the year of planting, ordering shrubs by November the year before, deep ripping two months before planting, and scalping or mounding the rows before planting.

Direct seeding is more cost effective than planting established seedlings, but is less reliable (spring and summer rains are needed), and not suitable for all shrub species. Direct seeding of Old Man Saltbush has been successful on some farms. Assessing the viability of seed with a germination test before seeding is essential.

Grazing management

Following the establishment year, shrubs should not be grazed for at least 12 to 18 months. First grazing should be short and sharp, and carefully monitored to ensure plants are not being pulled out of the ground by livestock.

Set stocking at a low density for long periods promotes selective grazing of new shoots, depleting shrub resources and eventually killing the plants. If plantings are to be used with high stock numbers for a very short term (e.g. overnight or before or after yard work), providing hay or straw will reduce the risk of overgrazing.

Maintaining a good supply of fresh water is critical. Old man saltbush has a high salt content, and livestock will quickly reduce intake if water is unavailable or the water itself has a high salt content.

For more detail see "Establishing forage shrubs" and "Grazing management to get the best out forage shrubs".



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