WA LANDCARE network

Managing Salinity
March 2021

A typical salt scald area in the Moore Catchment

Saltbush in the Moore Catchment

Farmers adding productivity to their unused marginally salty land

By Moore Catchment Council

'Targeted planting of saltbush in salty and otherwise unproductive areas of the farm creates the opportunity to transform land into highly productive grazing country.'

Saltbush trials were undertaken throughout the Moore Catchment area over the period between 2007—2013 involving over 25 landholders. The trials were all focused within the drier, more saline area of the Moore Catchment where land has been harshly impacted by salt, rendering it unproductive. All saltbush trials were very positively received by farmers and have enabled farmers to increase productivity on their unused marginally salty land. The saltbush requires little upkeep, grows easily with very minimal extra inputs and grows on the more harsh areas of the farm.

Why Saltbush?

Saltbush is an ideal fodder shrub to grow in the Moore Catchment area due to it's known capability to grow on salt impacted ground without needing large amounts of rainfall and it's palatability for livestock. Saltbush has high concentrations of crude protein and contains Vitamin E (which provides the sheep with greater resistance to worms) but has low amounts of energy and high concentrations of salt. The farmer must provide supplementary feed, such as lupins, barley or hay, and have plenty of fresh water nearby. Saltbush can provide huge relief from grazing pressure throughout the summer months or drought years.

Targeted planting of saltbush in salty and otherwise unproductive areas of the farm creates the opportunity to transform land into highly productive grazing country. Saltbush can double as wind and water erosion control by providing ground cover and slowing down the flow of runoff after heavy rains to reduce the sediment load further downstream.

Three main varieties of saltbush were planted in the Moore Catchment Council projects—Old man saltbush, river saltbush and rhagodia. The river and old man are the more palatable of the three and were the more widely planted varieties. River saltbush is bettersuited to waterlogged soil and old man is well adapted to withstand periods of drought.

Rhagodia saltbush

River saltbush

Old Man saltbush

The Future for Saltbush

Hayley Norman from CSIRO has been a research leader on saltbush as fodder shrubs for over a decade, beginning with the project 'Sustainable Grazing on Saline Lands'.

Hayley's intial focus was on finding a way to rehabilitate the expanses of saline land around the wheatbelt. One of her main aims was getting a profitable benefit for farmers on this unused salty land. This initial research led into looking at elite fodder varieties that would create the highest productivity off the land.

60, 000 old man saltbush plants were assessed and eventually 12 of the best cultivars were picked and trialled across 10 different sites in the wheatbelt. Out of these one was found as the best performing with high palatability and plant biomass. This was named Anameka saltbush.

Anameka saltbush at Chatfields Nursery

Anameka saltbush is grown under licence at Chatfields Nursery. At present the saltbush is grown from individual cuttings and propagated at the nursery until ready for sale as seedlings. This requires higher labour costs than growing from seed and has resulted in a higher cost of the seedling. The seedlings cost $0.83 compared to the lower price of $0.58 for a regular old man seedling grown from seed (2021 prices).

The next step in for Anameka saltbush is creating a seed line to reduce costs of seedlings. Hayley is interested in comparing the productivity of the Anameka planted from seedlings to those grown from the new seed line. She hopes that the variability of the saltbush grown from the seed line won't be too far from the seedlings grown from cuttings.

One of the main factors that Hayley thinks is important to get saltbush used more by farmers is eduction. Educating the farmers on saltbush grazing methodology and on it's produtvity and nutritional benefits is imperative for the future uptake of growing the fodder shrub.

One of the Chatfields and CSIRO's saltbush trial plots in Tammin

For more information about the saltbush trials view The Moore Review Project or contact the Moore Catchment Council on (08) 9653 1355 or moorecc@bigpond.com.

For more information on attaining Anameka saltbush contact Dustin (0427 371 075) or Lisa (0429 371 076) Email: info@chatfields.com.au at Chatfields Nursery, or visit their website www.chatfields.com.au.

Trial Conclusions

The saltbush projects were positively received by all farmers. The use of saltbush has allowed farmers to add productivity to their unused marginally salty land with all farmers spoken to providing positive feedback.

Saltbush requires little upkeep, grows easily with very minimal extra inputs and grows on the more harsh areas of the farm. Sites that had low survival rates planted their seedlings on land that was too salty.

The low maintenance properties of saltbush paired with the added productivity the saltbush has provided make saltbush a positive salinity management option.

Recommendations:

- Don't plant the saltbush on ground that is too salty, instead plant it on the fringes of these areas to slowly improve the area.
- Maintain a good grazing system to ensure the shrubs don't get too woody.
- If you have saltbush planted use it! It is a valuable source of feed!