

# KILBURNIE

Coomandook

Owner: Graham Potter

Manager: Robert Luke

Ian Wilson, farmer, Coomandook contract sowed saltbush

Own property size: 1460 ha (450 ha sold early '96)

## Progression of saline areas:

1925: 170ha natural samphire, barley grass and salt swamp  
1985: 190ha  
1989: 360ha  
1991: 425ha

The increase in saline areas occurred rapidly and spread like a cancer. Crops and pastures became poor and eventually died. Areas where nothing would germinate on the opening rains became larger. Some germination eventually occurred after further rain leached salt from the topsoil.

A rising water table and subsequent decline in soil structure became apparent as the soil surface of the lower lying areas became slippery and waterlogged. The increased salinity is caused by the rising regional water table bringing salty water closer to the soil surface. This is compounded by local recharge.

- In low lying salt affected areas the aim was to establish and graze salt tolerant pastures.

## Establishment method:

1. Chemical topped the year before renovation
2. Cultivation in late summer
3. Knockdown herbicide used after the opening rains to kill germinated weeds.
4. Mixture of puccinellia (3kg/ha) and tall wheat grass (6kg/ha) sown about June
5. Mix of saltbush sown about August (WC Diamond niche seeder purchased in 1991)
6. Wavyleaf saltbush (*A.undulata*) has established very well. Other species included River saltbush (*A.amnicola*), quail bush (*A.lentiformis*) and River Murray saltbush (*A.rhagodioides*)
7. Cost of establishment of rows two metres apart is about \$200/ha. Three metre spacing about \$150/ha.

- Mid-slopes are used for cropping and annual pastures with native trees planted on some areas.
- On sandhills the aim is to increase water use, reduce recharge and improve productivity. This is done by: -
  - a) Lucerne re-establishment using combine seeder fitted with press wheels. Paddocks chemical topped and direct drilled.
  - b) Establishment of fodder shrubs such as tagasaste and Acacia saligna. Plantations reduce wind erosion, provide shelter and autumn fodder reserve. Costs are about \$90/ha for rows eight metres apart plus fencing and water costs.

**Stocking rates: 17.5 DSE/ha over a year on reclaimed areas.**

It has been noted, that the country that was least productive, is now the most productive since the establishment of saltbush. If grown in conjunction with salt tolerant grasses, the saltbush can provide very adequate fodder for stock.

The advantages of saltland pastures are that they provide valuable feed to fill the autumn feed gap and reduce the requirement of supplementary feeding. Together with improved water use on the recharge areas, the spread of salinity seems to have halted.