



OULNINA

OWNERS

The Francis Family

LOCATION

North East Pastoral

PROPERTY TENURE

Pastoral Lease

ENTERPRISES

Sheep – meat and wool

Recovering Eroded Land in SA's Pastoral Lands

Maurice and Janet Francis took over management of Oulnina in 1967, when the land was in the grip of drought. During that drought, they started using disc pitters and rippers to make small depressions and furrows in the ground to trap seed and water on bare land. Furrows were ripped on the contour; found by using a water hose level.



Photo: Maurice & Janet Francis

East Jumbuck paddock May 1983. Land was bare and vulnerable to wind sweep.



Ripping furrows on Oulnina. The ripper is a single-tined implement with 'wings' on both sides of the tine to throw a mound of soil either side of the furrow.

Land immediately
after ripping.



Photo: Maurice & Janet Francis

19/05/1983

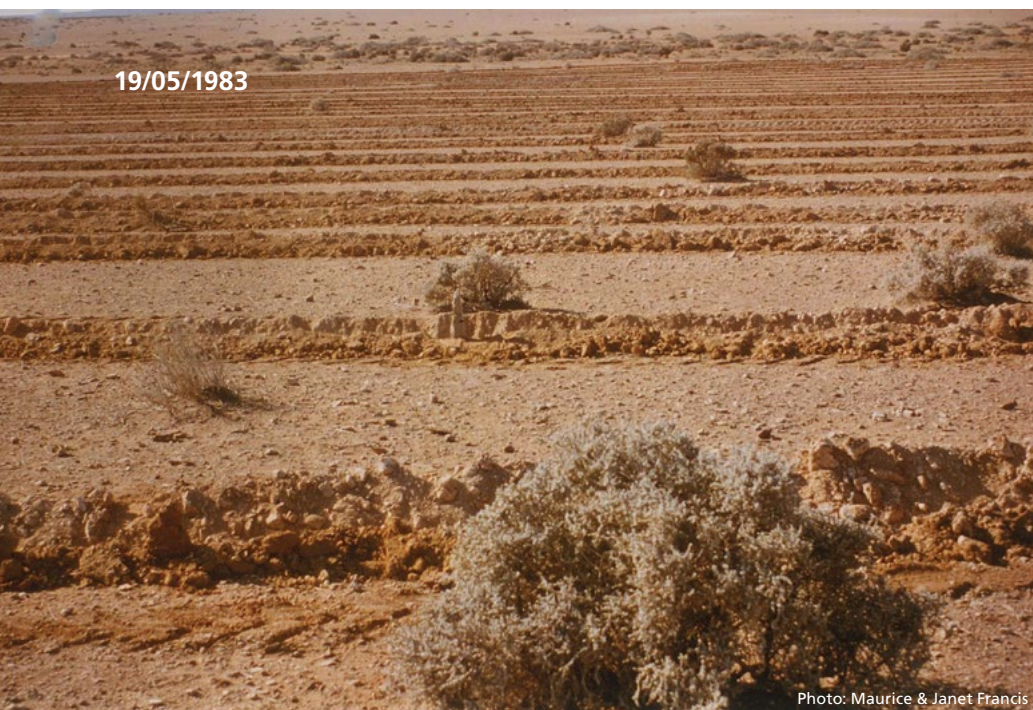


Photo: Maurice & Janet Francis

12/02/1987



STONY HILL
PPSC 50A
12.2.87

PHOTOPOINT 1983-2019

East Jumbuck paddock photopoint
site showing regeneration of Pearl
Bluebush.

Despite severe drought conditions
in 2019, bush cover is at least 25
times more than in 1983.

In the early 1980's, the Francis' participated in the 'Mannahill-Olary Soil Conservation Project' conducted by the South Australian Department of Agriculture. The project's officer worked with landholders to identify and treat areas suitable for rehabilitation. On Oulnina, contour furrowing work was carried out in the 'East Jumbuck' paddock.

At the time, the region was again experiencing a severe drought. The East Jumbuck paddock was regarded as one of the property's most productive ones but had become quite bare. The dominant vegetation was *Maireana sedifolia* (Pearl Bluebush) but this had been reduced to a few scattered bushes.

Key lines were surveyed with a dumpy level to ensure that furrows were ripped on the contour as the land had gentle to moderate slopes of one to four percent. Contour furrows slow runoff and enable it to soak into the soil as well as acting as a barrier to wind sweep. Furrows were ripped to a depth of approximately 45 cm and spaced between five to ten metres apart.

The furrows trapped seed and plant litter, improved water storage and infiltration, protected seedlings from wind damage, and provided a seed bed.

The furrows were ripped in May 1983 and after rains in July 1983, thousands of bluebush seedlings grew. Many of these persisted and grew and remain to this day.

Other measures have been implemented on Oulnina to improve the condition of the land. The East Jumbuck paddock was split into two to enable better control of stock grazing, particularly where the young seedlings were growing. The number of watering points on the property has been doubled to spread grazing stock out over a wider area. When bushes in a paddock being grazed start to suffer, the stock are taken out of the paddock. Over ten to eleven thousand goats have been removed from the property in recent years and rabbit numbers have been significantly reduced.



Photo: Maurice & Janet Francis



27/03/2019



An aerial view of East Jumbuck shows how most of the bushes are in furrow lines.

The lines are continuous and Maurice says that one mistake they made at the time of furrowing was not to leave some breaks in the lines. This would have made it less rough and less time consuming for mustering and travel through the paddock.

The 2017-onwards drought is the longest drought period experienced on the property in the family's history but the land has far more vegetative cover than it did in 1982-83. Stock numbers have been more than halved in the current drought but are more than they carried in 1982.

The Francis' run less sheep than they could as it is more productive for them to improve the condition and lambing percentage of fewer animals than comprising stock condition by running more. Costs per head are also less.

Maurice and Janet have gained considerable personal satisfaction from their work on Oulnina that has obviously improved the condition of the land. They were so appreciative of the results achieved in the East Jumbuck paddock that they renamed it 'Butler's paddock' after the project officer who worked with them.



Photo: Maurice & Janet Francis

Other areas were furrowed to regenerate bush, with very good results. Bare land around a watering point was ripped to stop dust blowing and regrew very well. The photo above was taken in May 1983, the one below during a very good season in 2011.



Photo: Maurice & Janet Francis

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Written by Mary-Anne Young, Primary Industries and Regions SA, with the assistance of SA Arid Lands NRM Board staff. June 2019.



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South Australian Arid Lands Natural Resources Management Board