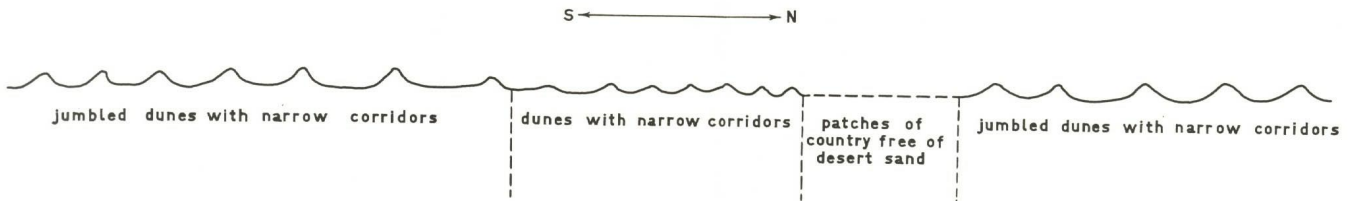


# Berrook Land System

Fig. 18. – Berrook Land System

## BERROOK LAND SYSTEM

### (a) Distribution of land forms



### (b) Land system diagram

AVERAGE ANNUAL RAINFALL: 11"–12"  
 LAND USE : Uncleared Crown land, sparsely grazed



LAND FORM	Type	Jumbled dune and dune	Sandplain
	Approx. percentage of land system	80	20
Approx. cross-section		4–10 chains	20–200 yards
PARENT MATERIAL		Coarse saltation material	
NATIVE VEGETATION		Scrub mallee containing tea tree Savannah mallee	Scrub mallee containing tea tree Savannah mallee Mallee
Textural group		Sands	
Morphological group		White deep sands	
SOIL	Proportion on land form	Dominant	Dominant
	Moisture characteristics	Good for deep-rooted species	
	Fertility reserves	Very low	
	LAND USE		Retention of native timber Unsuitable for cropping and grazing at present
Nutrients required in fertilizers		P, N, Cu ? Zn ?	
Land use class		6	
WIND EROSION HAZARD		Very severe	Severe

The Ouyen-Murrayville and Redcliffs-Morkalla settlements are separated by some 30 miles of uncleared country known locally as the "Sunset Desert" or the "Sunset Country". The southern half of this inaccessible area is made up of the Berrook land system, which stretches from the South Australian border almost to the River Murray, occupying some 1,130 square miles. It has much in common with the Big Desert land system, consisting of a vast tract of white, infertile sands which have been fashioned by the wind into jumbled dunes, east-west trending dunes and sandplains. Whatever the origin of these sands, it is likely to be similar in the two land systems. Although these have only minor differences in soils, their land form arrangement, native vegetation and climate are quite distinct.

In the Berrook land system white deep sands occupy virtually the whole landscape except in the atypical areas mentioned below. Most of the country contains dense jumbled dunes with narrow interdune corridors which occupy, on the average, only about 20 per cent of the landscape (Fig. 18). There are minor areas containing dense, relatively small dunes. The native vegetation consists of savannah mallee, scrub mallee in which tea tree is prominent and malice which is confined to the lowest sites. The average annual rainfall ranges between 11½ and 12 inches.

In the north the Berrook land system gives way to an uncleared section of the Central Mallee land system. On aerial photomaps the junction between the two areas can be seen to be quite sharp, the jumbled dunes of the Berrook land system forming a marked contrast to the regular east-west trending dunes of the Central Mallee land system.

The problems of land development are similar to those in the Big Desert land system, accentuated by the drier climate and the less satisfactory arrangement of the jumbled dunes in which the proportion of reasonably-sized sandplains is negligible. Removal of the native vegetation would undoubtedly lead to wholesale instability under the present levels of knowledge and land management.

Settlement has occurred within the land system boundary on a pocket of atypical country in and adjacent to the Parish of Berrook. Here there are considerable areas of sandy loams; of Groups A and B and also shallow sandy loams on limestone. In the eastern parts of the Parish there are large sandplains on which the soils are reddish yellow sands of Group D. This type of sandplain is not found to any extent elsewhere within the region except immediately to the north in the Central Mallee land system. In the settlement centred around the Parish of Berrook the infertile sands have in places been cleared, particularly where dunes run across larger areas of more fertile soils. These sands have proved to be an unmanageable erosion risk and they are largely reverting to scrub.

In the central parts of the land system there are several large plains on which the native vegetation and soils and topography differ markedly from the surrounding country. The largest of these are known as Birthday, Sunset and Mopoke Plains. They support attractive grasslands on which there are scattered pine, belar and buloke woodlands or savannahs alternating with areas of big mallee and shrub-steppe mallee in which the predominant shrub is bladder saltbush. The soils of the grasslands are mainly sandy loams of Group B with red sands of Group D on local low rises and gilgaied light clays on the lowest sites. Beneath the big mallee and shrub-steppe mallee sandy loams of Group A predominate. The plains are leased for light grazing of the native vegetation and this appears to be the most suitable form of land use. The grasslands supply good low-cost feed and stability has been well maintained except on the approaches to the occasional water-supply tanks which are fed by surface run-off. The sandy loams are suitable soils for cropping. However, because of the isolation of the plains, transport costs for grain could well be prohibitive. In addition there is insufficient water to carry the relatively large numbers of stock which would be required to graze the pastures needed to maintain the fertility of cropping soils. The grassland plains are areas of considerable natural beauty and their value as recreational areas would be lost if farms were to be developed.